

# Transportation Indicators

- ◆ Introduction (page i)
- ◆ Highlights this month — specially flagged trends (page ii)
- ◆ Summary of U.S. social and economic characteristics (page iii)
- ◆ Transportation system extent (page v)
- Indicators**
- ◆ Safety (page 1)
- ◆ Mobility (page 20)
- ◆ Economic growth (page 40)
- ◆ Human and natural environment (page 88)
- ◆ National security (page 95)
- ◆ An Analysis of Highway Hazardous Materials Incidents (page 101)

# Introduction

---

This report is intended to provide timely, easily accessible information for the transportation community. It was developed by the Bureau of Transportation Statistics (BTS) of the U.S. Department of Transportation (DOT), and is updated each month on the BTS website ([www.bts.gov](http://www.bts.gov)).

Each indicator is placed under a heading corresponding to one of the five strategic goals of DOT — safety, mobility, economic growth, environment, and national security. Some indicators are related to more than one strategic goal.

The indicators fall under two broad categories: those that provide context about the economy and society in which transportation functions, and those that convey information about an aspect of transportation. To the extent possible, these latter indicators are transportation-wide in scope; however, some apply to only part of the transportation system. Reference tables at the beginning of the document provide key statistics about U.S. social and economic characteristics, and about the extent of the transportation system.

For indicators that are highly seasonal, the current value of that indicator is compared to the same time period in the previous year (e.g., April 2001 compared to April 2000). Otherwise, the tables show a comparison of the current value to a comparable preceding period of time (e.g., the data for the month of April 2001 compared to that of March 2001).

BTS would like feedback about this report. Please send comments to:

Deborah Johnson  
Bureau of Transportation Statistics  
400 7 St, S.W.  
Room 3430 Nassif Building  
202-366-8578 (phone)  
202-366-3640 (fax)  
[deborah.johnson@bts.gov](mailto:deborah.johnson@bts.gov)



# Highlights – October 2001

---

	Page
✎ In July 2001, highway-rail fatalities dropped almost 18 percent, while incidents fell over 20 percent, compared to the same month last year.	7, 16
✎ Producer prices of crude petroleum dropped 24 percent from September 2000 to September 2001, while producer prices of petroleum products were down 7 percent.	45
✎ Producer prices of water transportation services rose almost 11 percent from September 2000 to September 2001.	46
✎ Public expenditures on construction of highways and streets fell nearly 10 percent from July to August 2001.	53
✎ Employment in air transportation declined nearly half a percent from August to September 2001, while employment in motor vehicle and equipment manufacturing declined more than 1 percent. Employment in public transit and water transportation increased 1 percent each.	56-57
✎ Advance retail sales dropped 2 percent from August to September 2001— suggesting changes in future demand for commercial transportation services.	72
✎ U.S. sales of light trucks (including pickups, sport utility vehicles, and vans) declined nearly 11 percent in September 2001 compared to September 2000, while sales of cars fell 14 percent and medium and heavy truck sales fell 26 percent.	77
✎ Average retail gasoline prices (all grades) declined 3 percent during the week of October 15, 2001, following a 4 percent decline the previous week.	79
✎ Net imports of petroleum declined nearly 12 percent in August 2001 compared to August 2000.	96
✎ The U.S. Coast Guard interdicted 469 illegal aliens in September 2001, 41 percent more than in September 2000.	100
<b>New this issue:</b>	
U.S. Active Pilots	30
An Analysis of Highway Hazardous Materials Incidents	101

The validity of these statements has not been statistically tested. BTS is designing a statistical monitoring process in order to apply statistical quality control techniques to the indicators data.



## Summary of Social and Economic Characteristics of the United States: 1980-2000

	1980	1985	1990	1995	1996	1997	1998	1999	2000
<b>Total U.S. resident population (thousands)<sup>a</sup></b>	<b>227,225</b>	<b>237,924</b>	<b>248,791</b>	<b>262,803</b>	<b>265,229</b>	<b>267,784</b>	<b>270,248</b>	<b>272,691</b>	<b>276,059</b>
<b>Age (thousands)<sup>a</sup></b>									
Under 18	63,754	62,623	63,949	68,555	69,109	69,603	69,903	70,199	70,484
18-24 years	30,022	28,902	26,961	25,112	24,843	24,980	25,476	26,011	26,748
25-34	37,082	41,696	43,174	40,730	40,246	39,559	38,743	37,936	37,189
35-44	25,634	31,691	37,444	42,555	43,365	44,014	44,498	44,813	44,813
45-54	22,800	22,460	25,062	31,100	32,358	33,625	34,575	35,804	37,685
55-64	21,703	22,135	21,116	21,132	21,353	21,813	22,666	23,389	24,209
65 and over	25,550	28,415	31,083	33,619	33,957	34,185	34,385	34,540	39,301
<b>Sex (thousands)<sup>b</sup></b>									
Male	110,053	116,160	121,284	128,294	129,504	130,783	132,030	133,277	134,979
Female	116,493	122,576	127,507	134,510	135,724	137,001	138,212	139,414	141,080
<b>Metropolitan areas (population in millions)</b>									
Large (over 1 million)	119	U	139	147	149	151	153	156	U
Medium (250,000-999,999)	41	U	41	44	44	43	43	43	U
Small (less than 250,000)	17	U	18	19	19	20	20	20	U
<b>Rural v. urban areas (population in thousands)</b>									
Rural	59,495	U	61,656	U	U	U	U	U	U
Urban	167,051	U	187,053	U	U	U	U	U	U
<b>Regions (population in millions)<sup>c</sup></b>									
Northeast	49.1	49.9	50.8	51.4	51.6	51.6	51.7	51.8	U
South	75.4	81.4	85.5	91.8	93.1	94.2	95.3	96.5	U
Midwest	58.9	58.8	59.7	61.8	62.1	62.5	63.0	63.2	U
West	43.2	47.8	52.8	57.7	58.5	59.4	60.3	61.2	U
<b>Immigrants admitted</b>	530,639	570,009	1,536,483	720,461	915,900	798,378	660,447	U	U
<b>Total area (square miles)</b>	3,618,770	U	3,717,796	U	U	U	U	U	U

-Table continued on next page-



## Summary of Social and Economic Characteristics of the United States: 1980-2000 (continued)

	1980	1985	1990	1995	1996	1997	1998	1999	2000
<b>Gross Domestic Product (GDP)</b> (chained \$ 1996 billions) <sup>d</sup>	4,901	5,717	6,708	7,544	7,813	8,160	8,516	8,876	9,319
<b>Total civilian labor force (thousands)</b> <sup>e</sup>	106,940	115,461	125,840	132,304	133,943	136,297	137,673	139,368	141,489
Participation rate of men	77.4%	76.3%	76.4%	75.0%	74.9%	75.0%	74.9%	74.7%	74.6%
Participation rate of women	51.5%	54.5%	57.5%	58.9%	59.3%	59.8%	59.8%	60.0%	60.2%
<b>Unemployment rate</b>	7.1%	7.2%	5.6%	5.6%	5.4%	4.9%	4.5%	4.2%	4.0%
Men	6.9%	7.0%	5.7%	5.6%	5.4%	4.9%	4.4%	4.1%	4.0%
Women	7.4%	7.4%	5.5%	5.6%	5.4%	5.0%	4.6%	4.3%	4.0%
<b>Number of households (thousands)</b>	80,776	86,789	93,347	98,990	99,627	101,018	102,528	U	U
<b>Average size of households</b>	2.76	2.69	2.63	2.65	2.65	2.64	2.62	U	U
<b>Median household income</b> (chained \$ 1996)	33,722	34,439	35,945	35,082	35,492	36,175	37,430	U	U
<b>Families below poverty level (thousands)</b>	6,217	7,223	7,098	7,532	7,708	7,324	7,186	U	U
<b>Average household expenditures</b> (chained \$ 1996)	U	34,253	34,070	33,217	33,797	34,038	34,205	U	U

KEY: U = Unavailable

<sup>a</sup> Estimates as of July 1 except 1980 and 1990, which are as of April 1, and 2000, which is as of November 1.

<sup>b</sup> 1995 through 2000 data are estimates.

<sup>c</sup> As of July 1 for all years except 1980 and 1990.

<sup>d</sup> For definition of chained dollars, see page 40.

<sup>e</sup> For 2000, as of December.

**SOURCES: 1980-1998 data:** Multiple sources as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Statistics 1999, Table A, p. xix.

**1999 Data: Population:** U.S. Department of Commerce, Bureau of the Census, available at: <http://www.census.gov>.

**Immigration:** U.S. Department of Justice, Immigration and Naturalization Services, *Annual Report: Legal Immigration* FY 1998, available at: <http://www.ins.usdoj.gov/graphics/aboutins/statistics/index.htm>.

**GDP, Average household expenditure, Median household income:**

U.S. Department of Commerce, Bureau of Economic Analysis.

**Employment (1980-1999):** U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/cpsatabs.htm>.

**Average Size of Households, Families below poverty level:** U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1999.



## Transportation System Extent

Mode	Components (1999 data unless otherwise noted)
<b>Highway</b>	<p><b>Public Roads</b>            46,567 miles of Interstate highway; 113,983 miles of other National Highway System roads            3,771,462 miles of other roads</p>
<b>Air</b>	<p><b>Public-use airports</b>            5,354 airports</p> <p><b>Airports serving large certificated carriers</b>            29 large hubs<sup>a</sup> (69 airports), 458 million enplaned passengers            31 medium hubs (48 airports), 96 million enplaned passengers            56 small hubs (73 airports), 39 million enplaned passengers            577 nonhubs (794 airports), 17 million enplaned passengers</p>
<b>Rail</b>	<p><b>Miles of road operated</b>            120,986 miles by Class 1 freight railroads<sup>b</sup>            21,250 miles by regional freight railroads            28,422 miles by local freight railroads            22,741 miles by Amtrak (passenger), of which 750 miles are Amtrak owned</p>
<b>Urban transit (1998)</b>	<p><b>Directional route-miles serviced</b>            Bus: 157,823; Trolley bus: 424; Commuter rail: 5,172 Heavy rail: 1,527; Light rail: 676</p> <p><b>Stations</b>            Commuter rail: 972; Heavy rail: 987; Light rail: 555</p>
<b>Water</b>	<p>26,000 miles of navigable waterways            276 locks; Ferry routes: 48</p> <p><b>Commercial Facilities</b>            Great Lakes: 619 deep; 144 shallow            Inland: 2,376 shallow            Coastal: 4,050 deep; 2,118 shallow</p>
<b>Pipeline</b>	<p><b>Oil</b>            Crude lines: 88,000 miles of pipe; Product lines: 91,000 miles of pipe</p> <p><b>Gas</b>            Transmission: 254,000 miles of pipe; Distribution: 981,000 miles of pipe</p>

<sup>a</sup>A hub is defined as a geographic area based on the percentage of total enplaned passengers in that area. For example, a large hub serves 1 percent or more of all enplaned revenue passengers in U.S. certificated route carriers operating in U.S. areas. This definition should not be confused with airline usage of the term hub to describe "hub and spoke" route structures.

<sup>b</sup> Includes 574 miles of road operated by U.S. Class 1 freight railroads in Canada.

**SOURCES:** U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS), Transportation Statistics Annual Report 2000 (Washington DC: in press), table 1-1; USDOT, BTS, *National Transportation Statistics 2000* (Washington DC:in press), various tables; Association of American Railroads, *Railroad Facts 2000*, (Washington DC:2000); USDOT, Federal Highway Administration, *Highway Statistics 1998* (Washington DC: 1999); National Ferry Database, as of 10/10/00; and U.S. Army Corps of Engineers, Navigation Data Center, *The U.S. Waterway System - Transportation Facts*, December 2000.

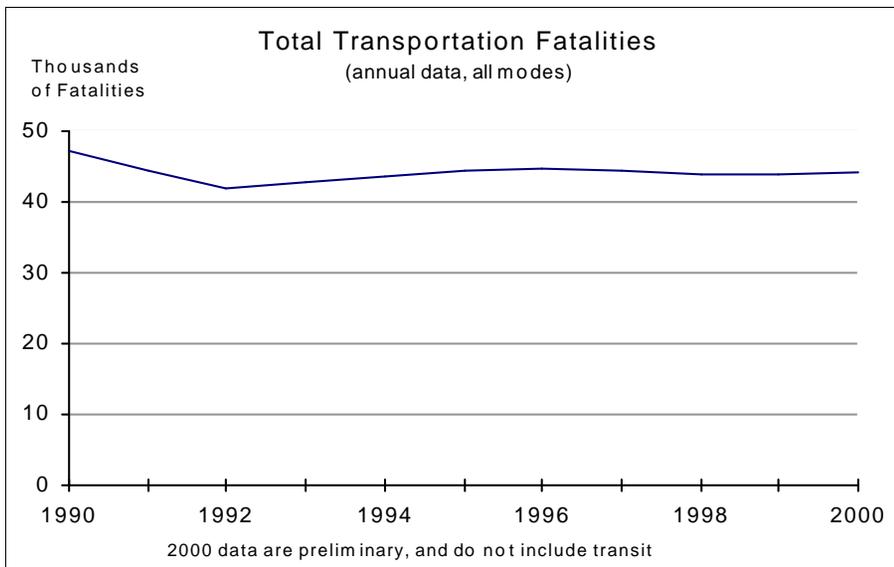


# Safety

	Page
Transportation Fatalities: All Modes	2
Motor Vehicle-Related Highway Fatalities	3
Fatalities in Large-Truck Crashes	4
Alcohol-Related Highway Fatalities	5
Transit Fatalities	6
Railroad and Highway-Rail Crossing Fatalities	7
Hazardous Liquid and Natural Gas Pipeline Fatalities	8
General Aviation Fatalities	9
Commercial Aviation Fatalities	10
Recreational Boating Fatalities	11
Fatalities in Commercial Maritime Transportation	12
Injured Motor Vehicle Occupants, Pedestrians, and Bicyclists	13
Injured Persons in Large-Truck Crashes	14
Injured Persons: Transit, Rail, Grade Crossings, and Boating	15
Rail Accidents and Incidents	16
Hazardous Materials Incidents	17
Modal Breakdown of Hazardous Materials Incidents	18
Hazardous Materials Incidents Involving Crashes or Train Derailments	19



ANNUAL TRANSPORTATION FATALITIES: ALL MODES



Transportation Fatalities	1999	2000*
Total	43,866	44,041
Percent change from previous year	-0.02	0.40

\* Preliminary estimate, does not include transit.

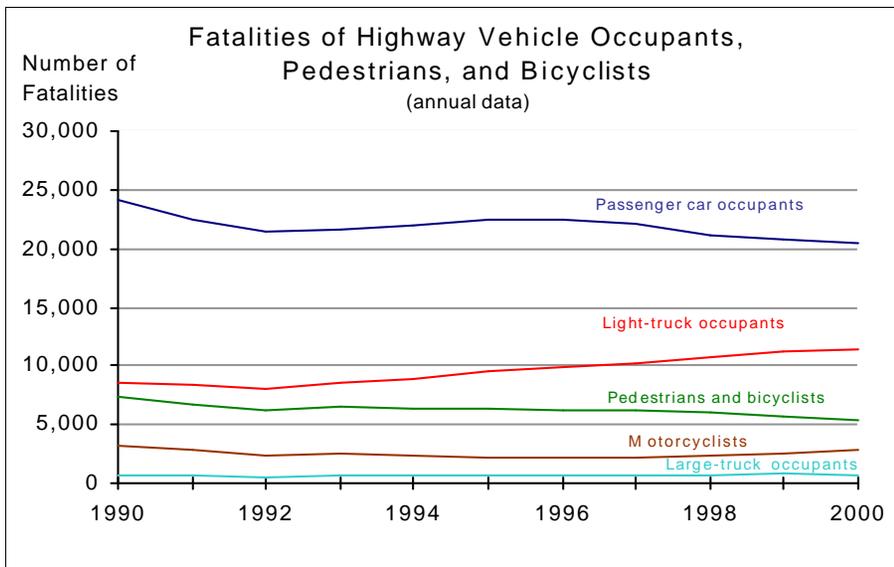
SOURCES: Data compiled from various government agencies as cited in the U.S. Department of Transportation (USDOT), *Performance Plan FY 2002* and *Report FY 2000*, April 2001, available at: <http://ostpxweb.dot.gov/budget/perfplan02/contents.html>

Fatalities represent the most severe safety consequence for the transportation system. According to preliminary estimates, in 2000 there were 44,041 transportation-related fatalities, compared to 47,348 in 1990.

See U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1999*, pp. 273-280, for detailed discussion of modal fatality data.



MOTOR VEHICLE-RELATED HIGHWAY FATALITIES



Highway crashes caused 94 percent of all transportation-related fatalities in 2000. They were the leading cause of death of people ages 5 through 29 (DOT Performance Plan FY 2002 and Performance Report FY 2000).

NOTES: Large trucks — trucks over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors.

Light trucks — trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles. The number of light trucks has increased greatly since 1990, affecting light truck occupant fatality numbers.

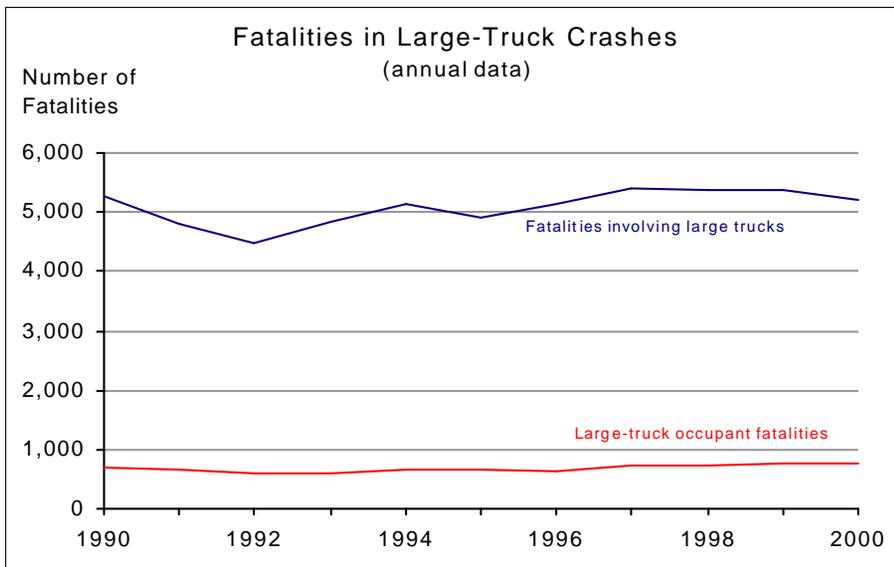
See U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1999*, pp. 273-280, for detailed discussion of modal fatality data.

Fatalities by Type	1999	2000
Highway total	41,611	41,800
<i>Percent change from previous year</i>	0.27	0.45
Passenger car occupants	20,862	20,492
<i>Percent change from previous year</i>	-1.57	-1.77
Light-truck occupants	11,243	11,439
<i>Percent change from previous year</i>	5.03	1.74
Pedestrians	4,939	4,739
<i>Percent change from previous year</i>	-5.53	-4.05
Motorcyclists	2,483	2,862
<i>Percent change from previous year</i>	8.24	15.26
Large-truck occupants	758	746
<i>Percent change from previous year</i>	2.16	-1.58
Bicyclists	754	690
<i>Percent change from previous year</i>	-0.79	-8.49
Other highway	596	857
<i>Percent change from previous year</i>	10.37	43.80

SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Traffic Safety Facts, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf>



FATALITIES IN LARGE-TRUCK CRASHES



Large-Truck Crashes	1999	2000
Fatalities involving large trucks	5,362	5,211
<i>Percent change from previous year</i>	-0.22	-2.82
Large-truck occupant fatalities	759	749
<i>Percent change from previous year</i>	2.29	-1.32

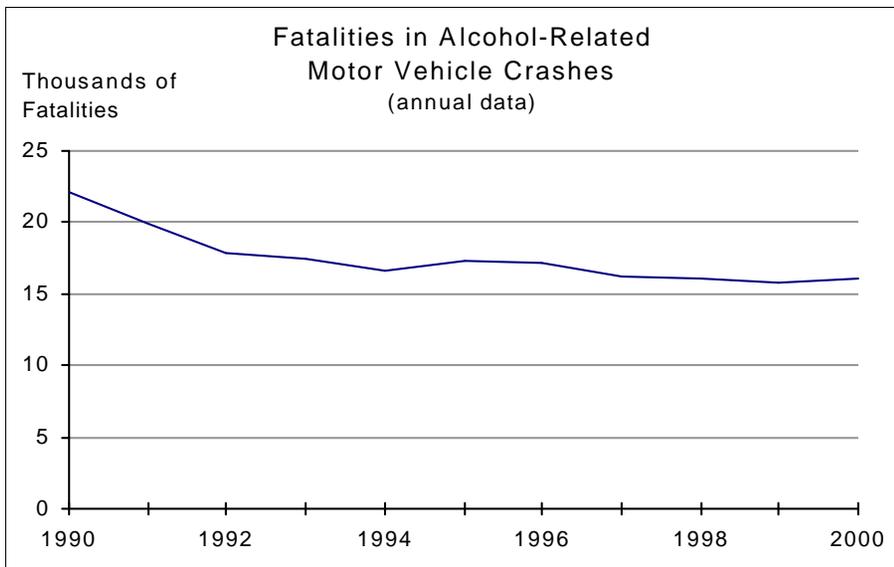
NOTE: Large trucks are over 10,000 pounds gross vehicle weight rating.

SOURCES: U.S. Department of Transportation, Federal Motor Carrier Safety Administration, Analysis Division, *Large Truck Crash Profile: The 1999 National Picture*, available at <http://www.fmcsa.dot.gov/factsfigs/mchsstats.htm>, and U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Traffic Safety Facts, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf>

Trucks represent 4 percent of registered highway vehicles, about 7 percent of vehicle miles of travel, and 8 percent of vehicles in fatal crashes. Occupants of other vehicles or people outside the truck account for 85% of total fatalities involving large trucks for 2000.



ALCOHOL-RELATED HIGHWAY FATALITIES

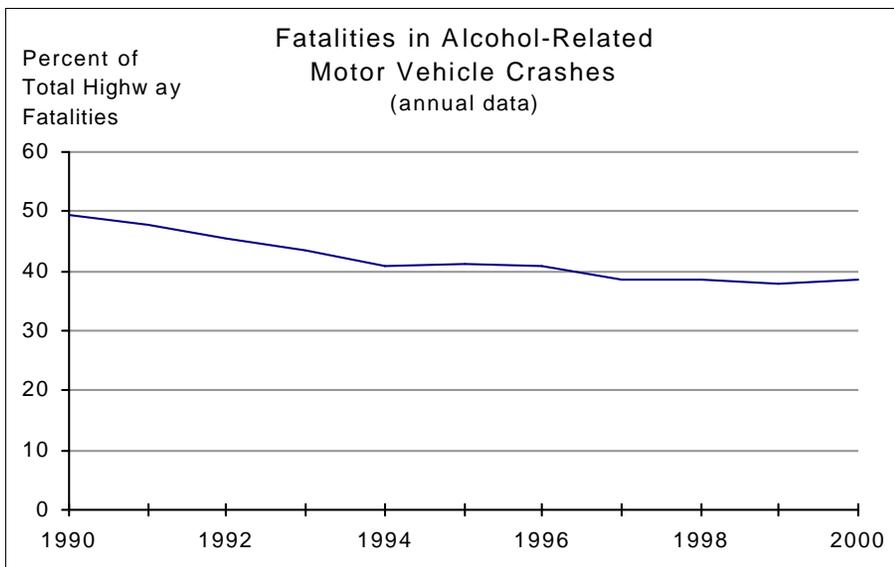


Alcohol-Related Highway Fatalities	1999	2000
Total	15,786	16,068
Percent change from previous year	-1.46	1.79

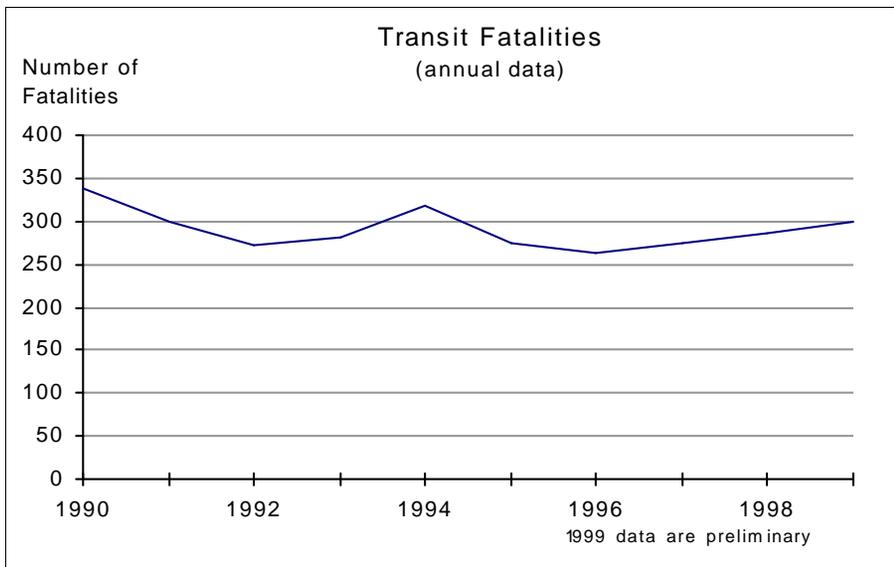
SOURCE: U.S. Department of Transportation, National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *Traffic Safety Facts 1998*, DOT HS 808 983 (Washington, DC: October 1999), table 13, and personal communication, Sept. 11, 2000. 2000 data: National Highway Traffic Safety Administration, National Center for Statistics and Analysis, *2000 Early Assessment*.

Alcohol is the single largest cause of fatal crashes. Alcohol-related fatalities accounted for nearly 38 percent of all highway fatalities in 2000.

Fatalities include those arising from motor vehicle related crashes in which the driver and/or a fatally injured pedestrian or other nonmotorist had a measured or estimated blood alcohol content of 0.01 grams per deciliter or greater.



TRANSIT FATALITIES



Transit Fatalities	1998	1999
Transit total	286	299
Percent change from previous year	4.00	4.55

Transit fatalities include those resulting from all reportable incidents, not just from accidents involving transit vehicles.

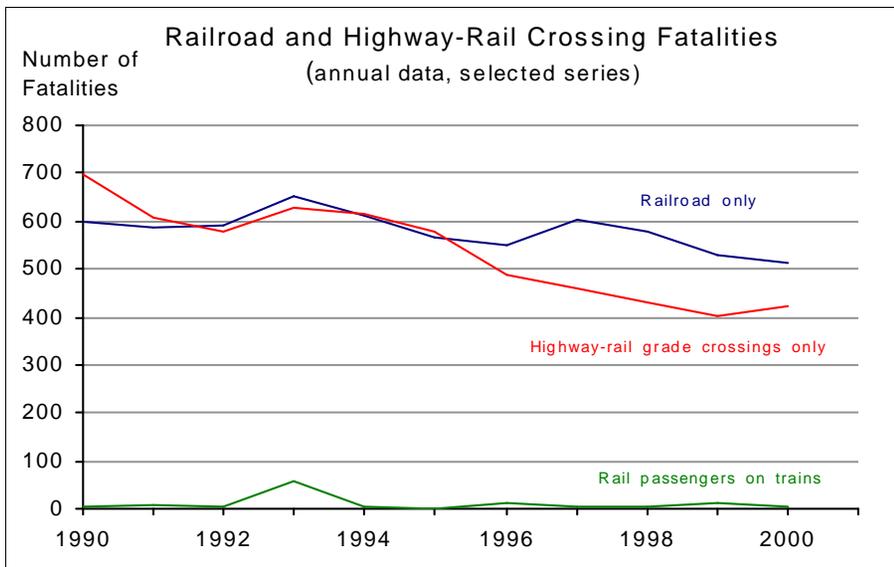
SOURCES: Data compiled from various government agencies as cited in the U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics, *National Transportation Statistics 1999*, table 3-1, available at: <http://www.bts.gov/ntda/nts/nts.html>, and the U.S. DOT, *1999 Performance Report/ 2001 Performance Plan*

Transit includes transit bus, light and heavy transit rail, commuter rail, paratransit, and other transit categories. Transit fatalities are transit-caused deaths confirmed within 30 days of a transit incident. The fatality numbers cited here do not include suicides.

SOURCE: U.S. Department of Transportation, Federal Transit Administration, State Safety Oversight Program, Annual Report for 1999, available at <http://transit-safety.volpe.dot.gov>

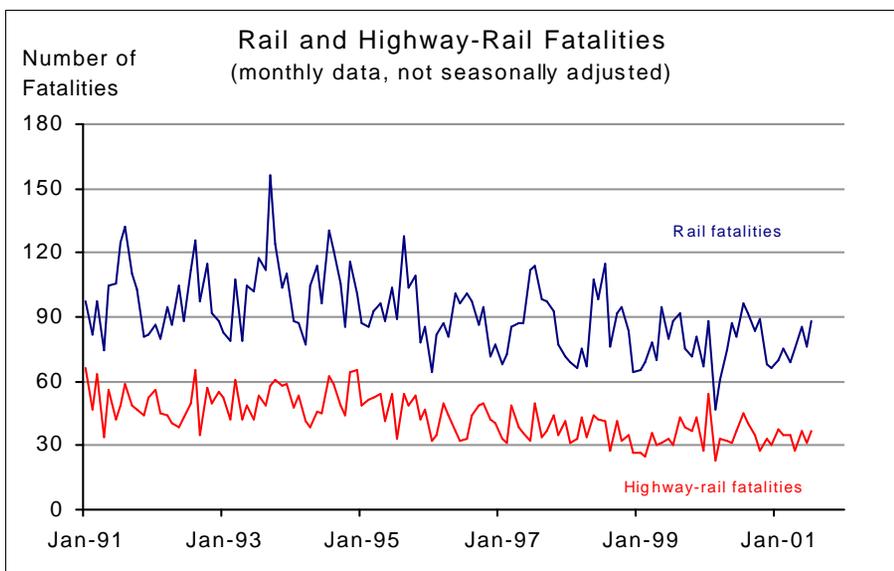


**RAILROAD AND HIGHWAY-RAIL CROSSING FATALITIES**



Rail-Related Fatalities	1999	2000
Railroad only total	530	512
<i>Percent change from previous year</i>	-8.15	-3.40
Grade crossing total	402	425
<i>Percent change from previous year</i>	-6.73	5.72
Passengers on trains	14	4
<i>Percent change from previous year</i>	250.00	-71.43

NOTE: "Rail passengers on trains" includes fatalities in both highway-rail grade crossings and non-grade crossing accidents. "Railroad only total" includes passengers on trains killed in nongrade crossing accidents. It also includes railroad workers (including contractors), other nontrespassers, and trespassers killed in train accidents, whether on or off the train, except at grade crossings. Data include both freight and passenger railroad operations.



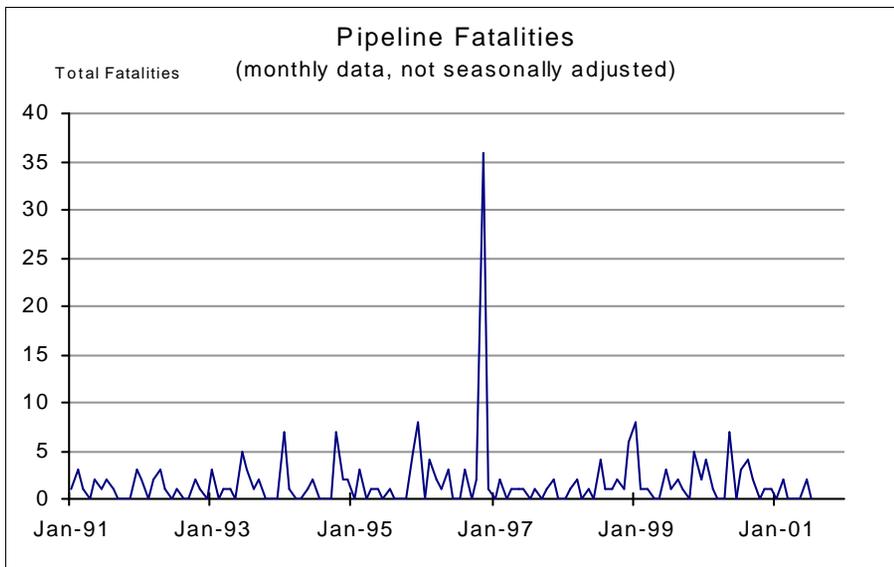
Railroad	Jul-00	Jul-01
Rail Fatalities	96	88
<i>Percent change from same month previous year</i>	9.09	-8.33
Highway-Rail Fatalities	45	37
<i>Percent change from same month previous year</i>	50.00	-17.78

SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, available at: <http://safetydata.fra.dot.gov/officeofsafety>

In most years, the overwhelming majority of people killed in train accidents are outside the train. Many are occupants of highway vehicles, pedestrians, or bystanders at highway-rail grade crossings. Railroad workers and others on railroad property (including trespassers) account for most other rail-related fatalities.



**HAZARDOUS LIQUID AND NATURAL GAS PIPELINE FATALITIES**



Note: Spike in graph represents leak and explosion of gas in a residential and shopping district in San Juan, Puerto Rico, 11/21/96.

Pipeline failures are low-probability events that can result in fatalities, injuries, and property damage. Over time, gas pipeline fatalities tend to outnumber those involving hazardous liquid (e.g., petroleum) pipelines. Outside force damage (e.g., damage to a pipeline during excavation for construction) is the leading cause of pipeline failures, followed by corrosion (DOT Performance Plan FY 2001).

Pipeline Fatalities	Jul-00	Jul-01
Total	3	0
Percent change from same month previous year	200.00	0

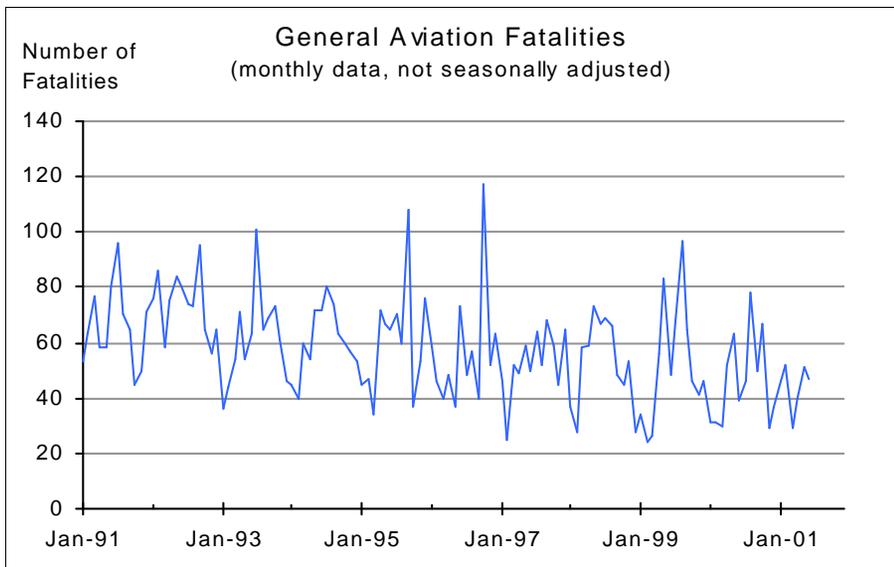
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

All 2001 data are preliminary, and subject to change as incidents are reported.

SOURCE: U.S. Department of Transportation, Office of Pipeline Safety, Research and Special Programs Administration, Online Library Accident and Incident Data as of Sept. 13, 2001, available at <http://ops.dot.gov/IA98.htm>



**GENERAL AVIATION FATALITIES**



General aviation fatalities comprise the majority of aviation fatalities in most years.

General Aviation	Aug-00	Aug-01
Fatalities	78	62
<i>Percent change from same month previous year</i>	<i>-19.59</i>	<i>-20.51</i>

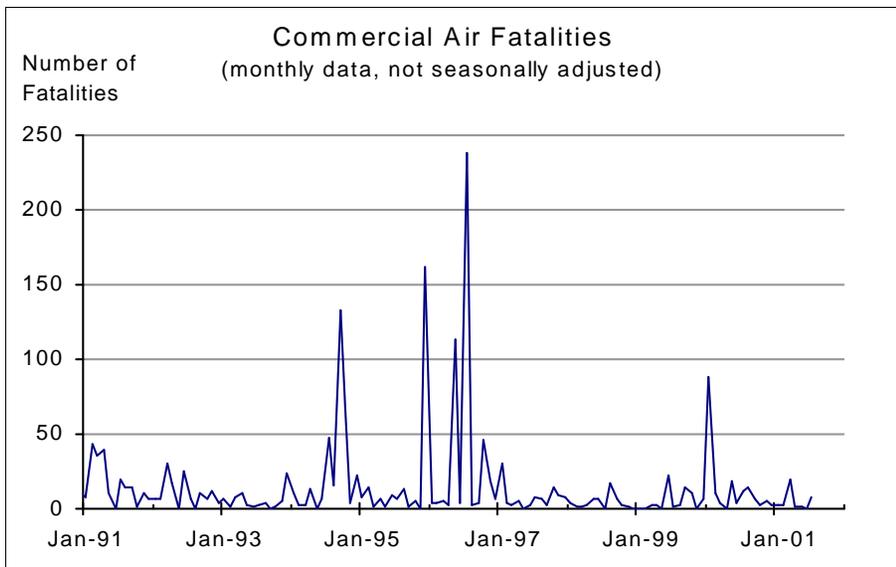
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

General Aviation – Movements of aircraft and helicopters belonging to individuals, companies not primarily in the aviation business, and flying clubs. Services provided by general aviation aircraft include firefighting, law enforcement, news coverage, and corporate in-house transportation.

SOURCE: National Transportation Safety Board, Office of Aviation Safety, available at: [http://www.ntsb.gov/aviation/curr\\_mo.txt](http://www.ntsb.gov/aviation/curr_mo.txt)



COMMERCIAL AVIATION FATALITIES



Commercial Air	Aug-00	Aug-01
Fatalities	15	18
<i>Percent change from same month previous year</i>	650.00	20.00

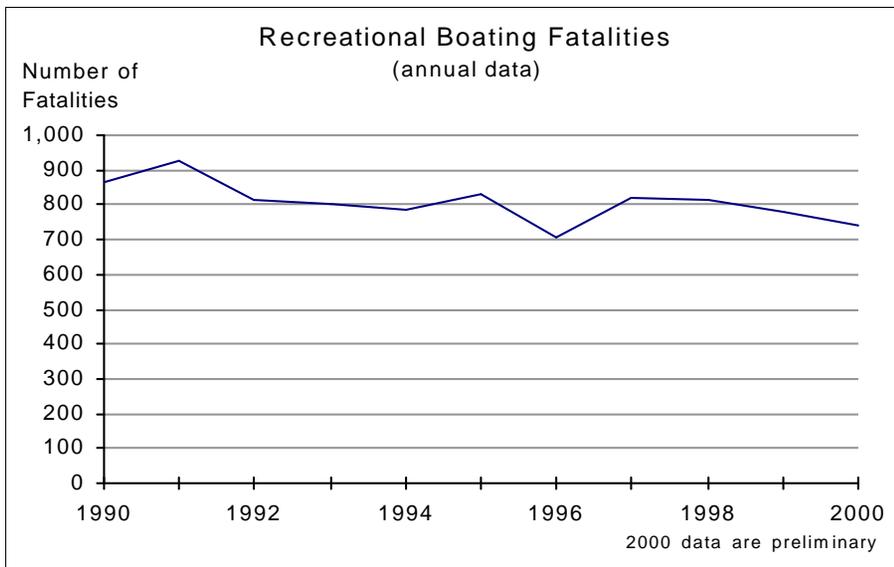
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: National Transportation Safety Board, Office of Aviation Safety, available at: [http://www.nts.gov/aviation/curr\\_mo.txt](http://www.nts.gov/aviation/curr_mo.txt)

Commercial air fatalities include those arising from accidents of planes providing passenger and/or cargo services to the public, including large air carriers, commuter air, and air taxi. Commercial air includes scheduled and nonscheduled service by air carriers operating under 14 Code of Federal Regulations (CFR) 121 and 14 CFR 135.



RECREATIONAL BOATING FATALITIES



Recreational Boating	1999	2000*
Fatalities	778	742
Percent change from previous year	-4.63	-4.54

\*Preliminary estimate

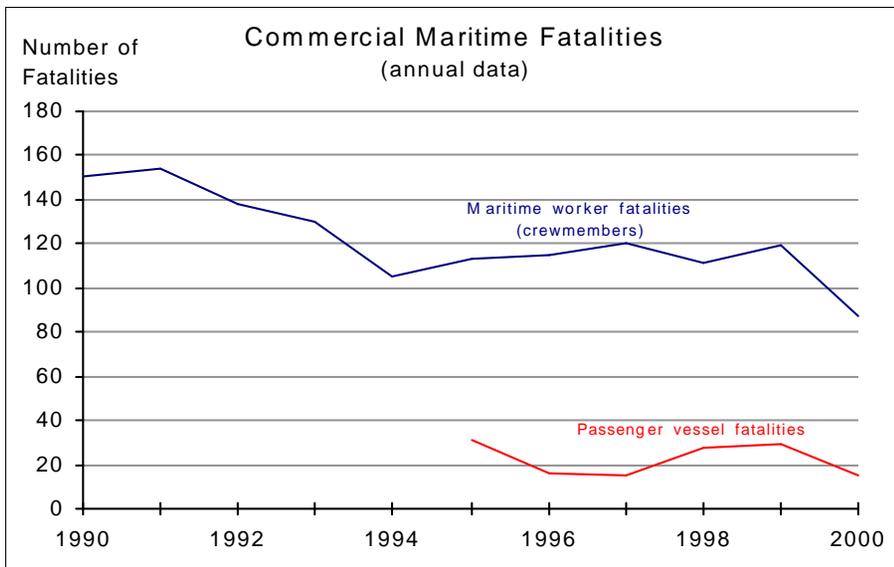
NOTE: Recreational boats include motorboats, personal watercraft (e.g., jet skis), sailboats, houseboats, rowboats, canoes, kayaks, and some other kinds of watercraft.

SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Boating Safety, *Boating Statistics* (Washington, DC: Annual issues).

Most fatalities, injuries, and accidents in water transportation involve recreational boating. Most recreational boating is discretionary, and the purpose of trips generally is to spend time on the water. The main cause of recreational boating accidents is human error.



FATALITIES IN COMMERCIAL MARITIME TRANSPORTATION



Maritime Fatalities	1999	2000*
Maritime worker fatalities	119	87
<i>Percent change from previous year</i>	7.21	-26.89
Passenger vessel fatalities	29	15
<i>Percent change from previous year</i>	3.57	-48.28

\*Preliminary estimate

NOTE: Crew member fatalities involve a death or disappearance of a crew member or employee aboard a U.S. vessel.

SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Plans, Policy and Evaluation, Personal Communication, and U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1999*, table 3-1, available at: <http://www.bts.gov/ntda/nts/nts.html>.

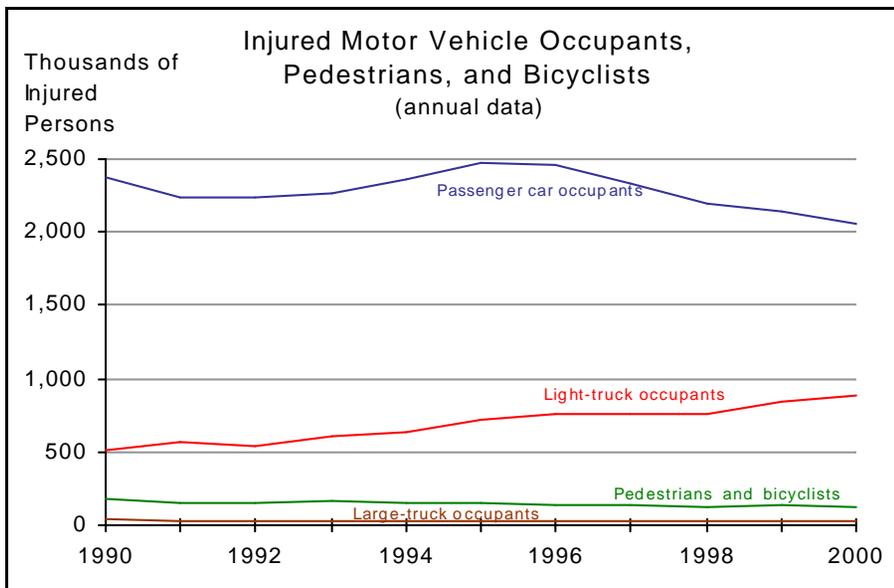
Maritime worker fatalities include crewmembers in the maritime industry aboard U.S. vessels/platforms. The data do not include fatalities on recreational boats or foreign vessels, or fatalities arising from intentional and natural causes. The largest percentage of maritime worker fatalities occur in commercial fishing.

Passenger vessel fatalities include death or disappearance of passengers aboard cruise ships, gambling ships, charter fishing boats, sightseeing boats, and passenger ferries. Deaths of maritime workers on passenger vessels are counted under maritime worker fatalities. Over 90 million people are carried aboard passenger vessels each year.

NOTE: Passenger vessel fatality measure has undergone substantial revision. Including data before 1995 would result in misleading comparisons.



**INJURED MOTOR VEHICLE OCCUPANTS, PEDESTRIANS, AND BICYCLISTS**



The vast majority of transportation injuries involve motor vehicles. The number of light trucks has increased greatly since 1990, affecting light truck occupant injury numbers.

Injured Persons by Mode	1999	2000
Highway total	3,236,000	3,190,000
<i>Percent change from previous year</i>	1.38	-0.53
Passenger car occupants	2,138,000	2,052,000
<i>Percent change from previous year</i>	-2.86	-3.27
Light-truck occupants	847,000	887,000
<i>Percent change from previous year</i>	11.01	5.43
Pedestrians and bicyclists	136,000	129,000
<i>Percent change from previous year</i>	11.48	-5.15
Motorcyclists	50,000	58,000
<i>Percent change from previous year</i>	2.04	16.00
Large-truck occupants	33,000	31,000
<i>Percent change from previous year</i>	13.79	-9.09
Bus occupants	22,000	18,000
<i>Percent change from previous year</i>	37.50	-18.18

NOTES: National estimates of highway injuries are sampled and subject to sampling errors. Highway table includes categories not displayed in graph.

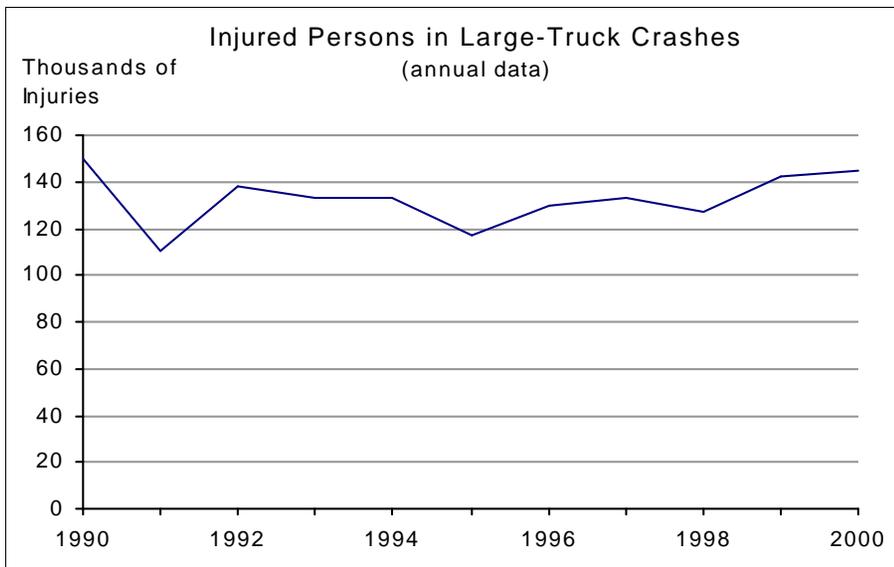
Light trucks — trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and utility vehicles.

See U.S. Department of Transportation, Bureau of Transportation Statistics, pp. 273-280, *National Transportation Statistics 1999* for detailed discussion of modal injury data.

SOURCE: Data compiled from various government agencies, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1999*, table 3-2, available at: <http://www.bts.gov/ntda/nts/nts.html>, and U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Traffic Safety Facts, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/nhsa/tsf2000/2000ovrfacts.pdf>



INJURED PERSONS IN LARGE-TRUCK CRASHES



Large-Truck Crashes	1999	2000
Injured persons involving large trucks	142,000	140,000
Percent change from previous year	11.81	-1.41

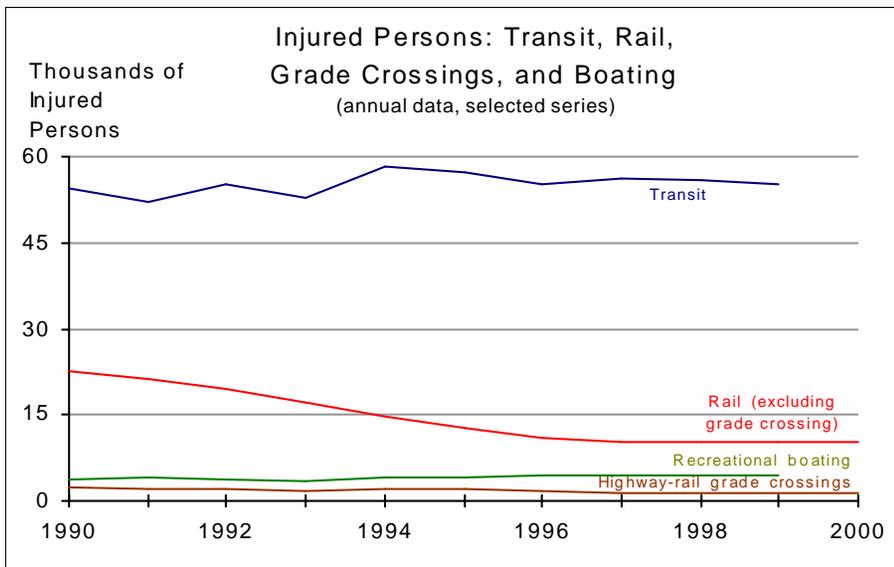
NOTE: Large trucks are trucks over 10,000 pounds gross vehicle weight rating.

SOURCES: U.S. Department of Transportation, Federal Motor Carrier Safety Administration, Analysis Division, *Large Truck Crash Profile: The 1999 National Picture*, available at <http://www.fmcsa.dot.gov/factsfigs/mchsstats.htm>, and U.S. Department of Transportation, National Highway Traffic Safety Administration, 2000 Traffic Safety Facts, available at <http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/ncsa/tsf2000/2000ovrfacts.pdf>

For 2000, preliminary estimates indicate that 79 percent of the total injuries involving large-truck crashes were occupants of other vehicles or outside the large truck.



INJURED PERSONS: TRANSIT, RAIL, GRADE CROSSINGS, AND BOATING



Since 1990, rail injuries have declined by 55 percent.

Injured Persons by Mode	1999	2000
Transit*	55,990	55,325
<i>Percent change from previous year</i>	-0.25	-1.19
Railroad	10,304	10,424
<i>Percent change from previous year</i>	1.46	1.16
Recreational Boating*	4,612	4,315
<i>Percent change from previous year</i>	-1.25	6.44
Highway-rail Grade Crossing	1,396	1,219
<i>Percent change from previous year</i>	7.14	-1.68

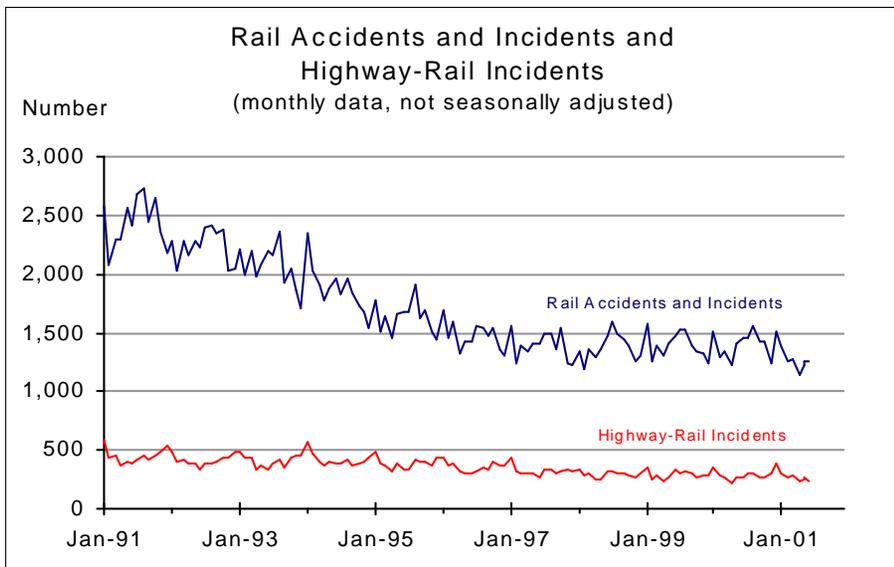
\* Data are for 1999 and 1998.

See U.S. Department of Transportation, Bureau of Transportation Statistics, pp. 273-280, *National Transportation Statistics 1999* for detailed discussion of modal injury data.

SOURCE: Data compiled from various government agencies, as cited in U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 2000*, table 2-2, available at: <http://www.bts.gov/btsprod/nts> and U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, available at <http://safetydata.fra.dot.gov/officeofsafety>



**RAIL ACCIDENTS AND INCIDENTS**



Railroad	Jul-00	Jul-01
Rail accidents and incidents	1,450	1,264
<i>Percent change from same month previous year</i>	<i>-5.17</i>	<i>-12.83</i>
Highway-Rail Incidents	299	239
<i>Percent change from same month previous year</i>	<i>0.67</i>	<i>-20.07</i>

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

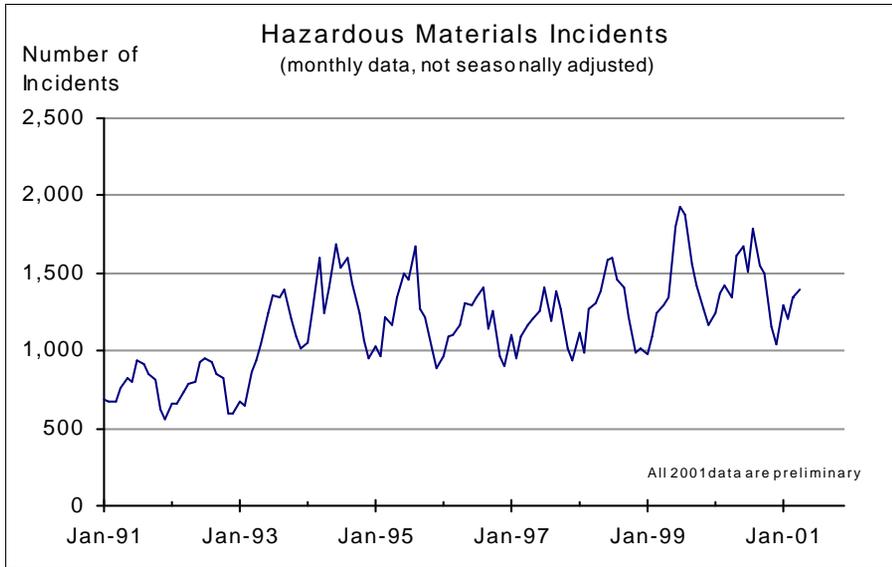
Accidents and incidents differ by the extent, in dollars, of the property damage resulting from the event.

SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety, available at: <http://safetydata.fra.dot.gov/officeofsafety>

Rail accidents and incidents include any collision between railroad on-track equipment and other vehicles or pedestrians at grade crossings; any event involving operation of railroad on-track equipment that results in damages to railroad property; and any event arising from railroad operations that results in death or injury, or, in the case of railroad employees, an occupational illness.



**HAZARDOUS MATERIALS INCIDENTS**



Hazmat Incidents	Apr-00	Apr-01*
Total	1,348	1,397
<i>Percent change from same month previous year</i>	3.93	3.64

Hazmat Serious Incidents	Apr-00	Apr-01*
Total	28	41
<i>Percent change from same month previous year</i>	33.33	46.43

\*Preliminary estimates

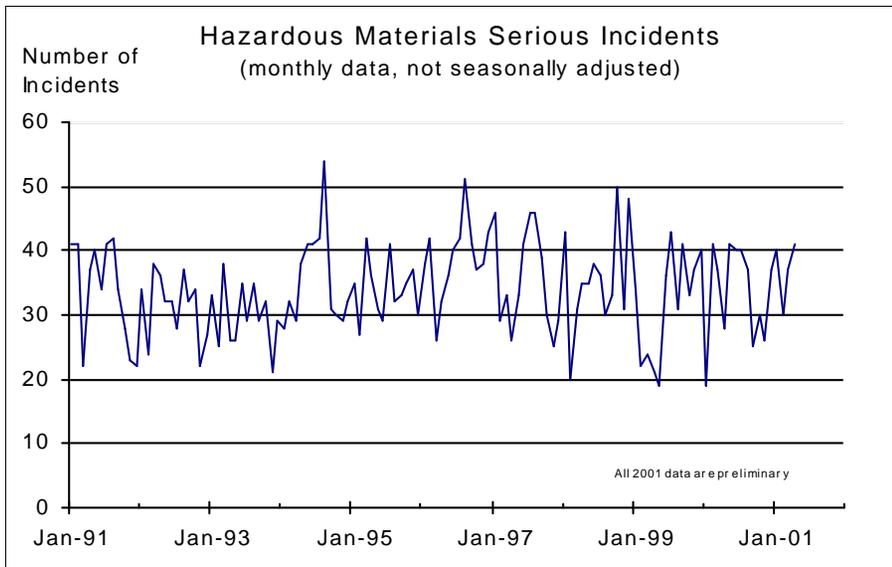
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Incident reporting requirements were extended to intrastate motor carriers on October 1, 1998. Beginning in April 1993, there was sharp improvement in reporting of incidents by small package carriers.

A reported incident is a report of any unintentional release of hazardous material while in transportation (including loading, unloading, and temporary storage). It excludes pipeline and bulk shipments by water, which are reported separately.

Research and Special Programs Administration (RSPA) defines serious incidents as incidents that involve a fatality or major injury due to a hazardous material, closure of a major transportation artery or facility or evacuation of six or more persons due to the presence of a hazardous material, or a vehicle accident or derailment resulting in the release of a hazardous material.

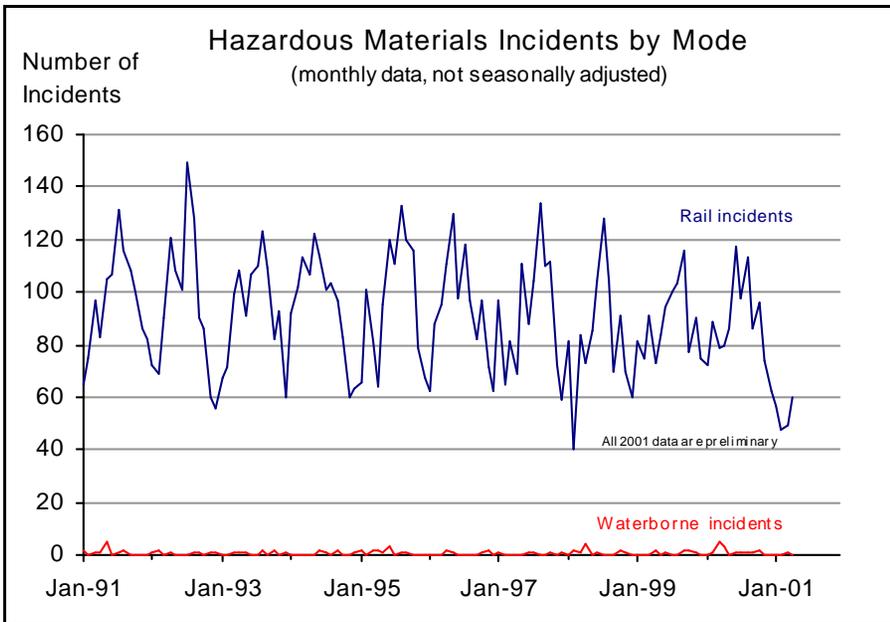
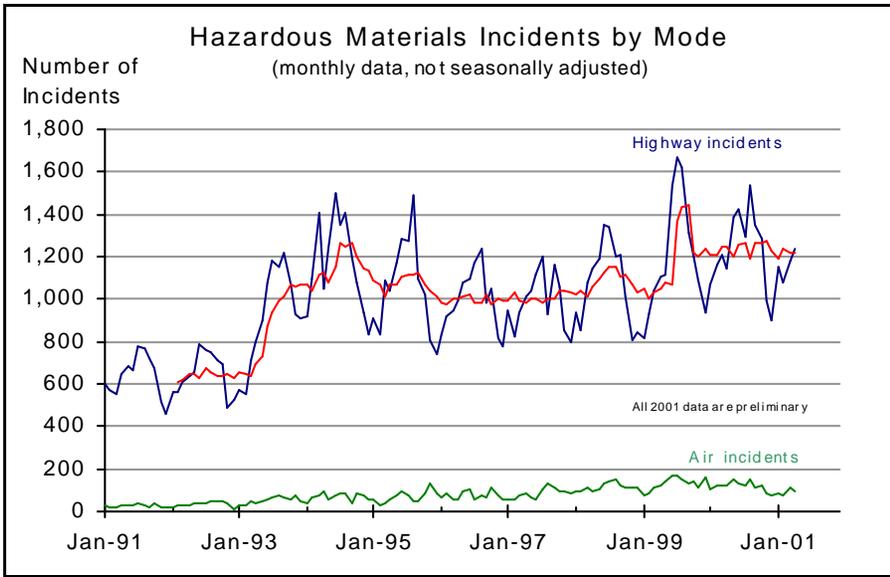
SOURCE: U. S. Department of Transportation, Research and Special Programs Administration (RSPA), Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.



Flammable liquids (e.g., gasoline) comprise the most tonnage and ton-miles of hazardous material shipments. Gasoline usage peaks in the summer and accounts for the seasonality in hazardous materials incidents.



MODAL BREAKDOWN OF HAZARDOUS MATERIALS INCIDENTS



Hazardous Materials Incidents by Mode	Apr-00	Apr-01
Highway	1,142	1,242
<i>Percent change from same month previous year</i>	3.63	8.76
Air	123	95
<i>Percent change from same month previous year</i>	2.50	-22.76
Rail	80	60
<i>Percent change from same month previous year</i>	9.59	-25.00
Waterborne (not including bulk shipments)	3	0
<i>Percent change from same month previous year</i>	50.00	-100.00

\*Preliminary estimates

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

A trendline has been provided for highway incidents. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., Structural Time Series Analyser, Modeller And Predictor (STAMP), London: Timberlake Consultants Ltd., 2000

Incident reporting requirements were extended to intrastate motor carriers on October 1, 1998, which may partly explain the subsequent increased volume of reports. Beginning in April 1993, there was sharp improvement in reporting of incidents by small package carriers.

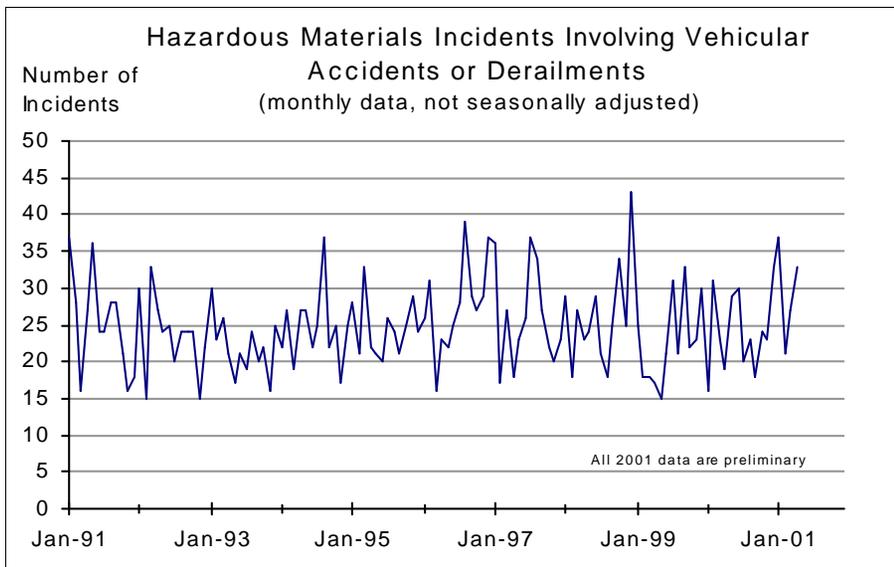
A reported incident is a report of any unintentional release of hazardous material while in transportation (including loading, unloading, and temporary storage). It excludes pipeline and bulk shipments by water, which are reported separately.

SOURCE: U. S. Department of Transportation, Research and Special Program Administration, Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.

Most reported releases of hazardous materials occur on the highways.



**HAZMAT INCIDENTS INVOLVING CRASHES OR TRAIN DERAILMENTS**



Hazmat Incidents	Apr-00	Apr-01*
Total incidents involving vehicular accidents	19	33
<i>Percent change from same month previous year</i>	11.76	73.68

\*Preliminary estimate

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Reporting requirements were extended to intrastate motor carriers on October 1, 1998, which may have affected data reported after this date.

Accident/derailment is a crash involving a motor vehicle or a derailment of a train.

SOURCE: U. S. Department of Transportation, Research and Special Program Administration, Office of Hazardous Materials, Planning and Analysis, Hazardous Materials Information System data obtained through personal communication.

Motor vehicle accidents or train derailments account for only a small portion of total number of hazardous materials incidents. However, their consequences are often the most severe.

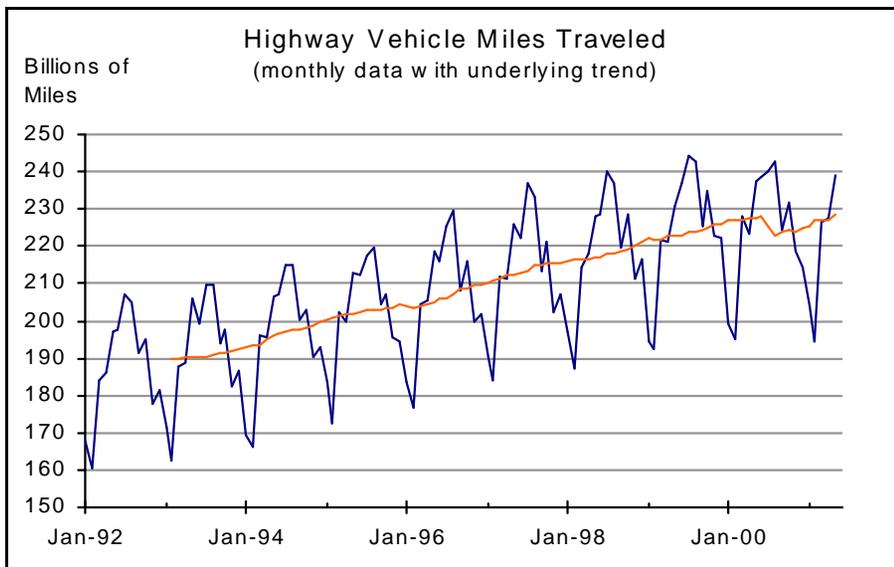


# Mobility

	Page
U. S. Highway Vehicle Miles Traveled	21
Availability and Use of Air Passenger Transportation	22
Availability and Use of Air Freight Transportation	23
Aircraft Capacity Utilization - Passengers and Freight	24
Flight Availability	25
Enplanements	26
Major U.S. Air Carrier On-Time Performance	27
Air Fares and Passenger Volume for the Top Five Major Short Routes	28
Air Fares and Passenger Volume for the Top Five Major Long Routes	29
U.S. Active Pilots	30
Public Transit	31
Public Transportation by Mode	32
Rail Freight	33
Weekly Rail Intermodal Traffic	34
Domestic Waterborne Freight	35
U.S. Inland Waterways Trade	36
Breakdown of U.S. Inland Waterways Trade	37
U. S. Foreign Waterborne Freight	38
Container Traffic Volume	39



U.S. HIGHWAY VEHICLE MILES TRAVELED



Vehicle Miles Traveled	May-00	May-01
Millions of highway miles	237,596	238,865
<i>Percent change from same month previous year</i>	2.95	0.53

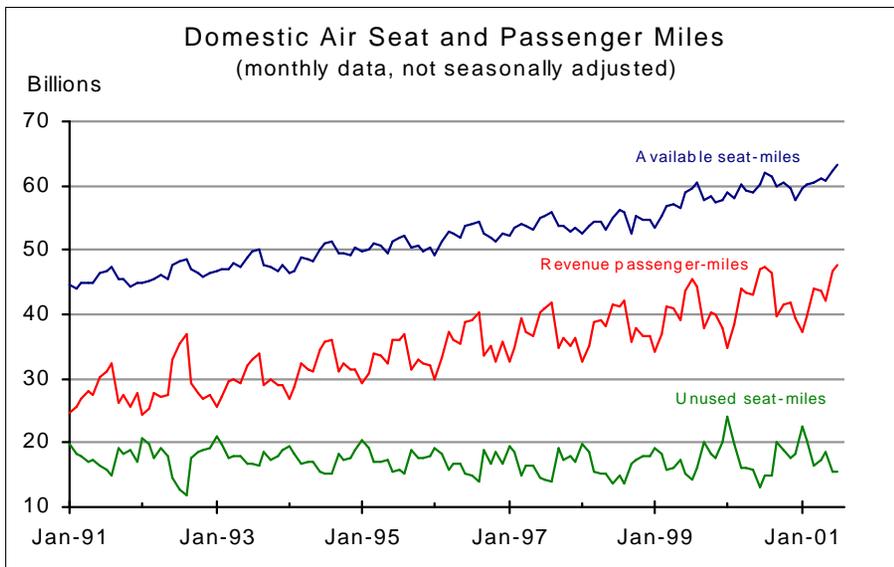
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality. A trendline has been provided for vehicle miles traveled. The trend has been calculated through a statistical procedure called Structural Modeling, in which the time series under study is decomposed into seasonal, trend and irregular components. For further information on this statistical procedure, see: S.J. Koopman, et al., Structural Time Series Analyser, Modeller And Predictor (STAMP), London: Timberlake Consultants Ltd. , 2000

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, available at <http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.htm>.

Vehicle miles of travel (VMT) are key data for highway planning and management, and a common measure of roadway use. Along with other data, VMT are often used in estimating congestion, air quality, and potential gas tax revenues, and can provide a general measure of the level of the nation’s economic activity.



AVAILABILITY AND USE OF AIR PASSENGER TRANSPORTATION



Domestic Passenger Aviation	Jul-00	Jul-01
Available seat-miles (billions)	61.98	63.42
<i>Percent change from same month previous year</i>	3.87	2.32
Revenue passenger-miles (billions)	47.24	47.76
<i>Percent change from same month previous year</i>	4.03	1.10
Unused seat-miles (billions)	14.74	15.66
<i>Percent change from same month previous year</i>	3.36	6.20

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

These indicators are components of the passenger and overall aircraft load factors displayed in "Aircraft Utilization—Passengers and Freight."

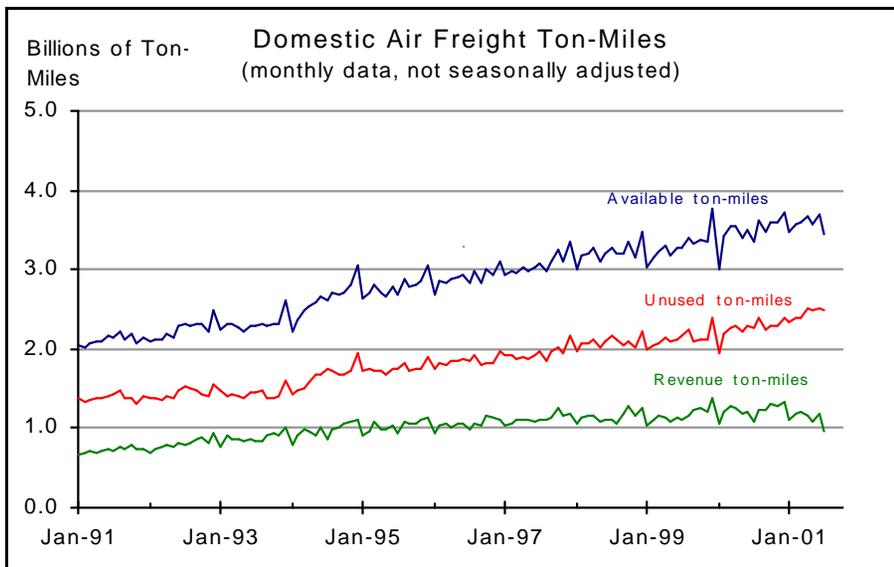
SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2001.

Revenue passenger-miles are a measure of the volume of air passenger transportation. Unused seat-miles (the difference between available seat-miles and revenue passenger miles) are used as a measure of airline capacity utilization. Another measure is the intensity of use of the equipment.

NOTE: A revenue passenger-mile is equal to one paying passenger carried one mile. Available seat-miles for an individual flight are the number of seats multiplied by the distance traveled. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.



AVAILABILITY AND USE OF AIR FREIGHT TRANSPORTATION



Though still much smaller than air passenger transportation, air freight is an increasingly important revenue source for the air transportation industry. It includes both freight handled by dedicated air cargo handlers and air cargo shipped on combined passenger and air freight carriers (passenger luggage is not considered cargo for this purpose).

Unused ton-miles are the difference between available ton-miles and revenue ton-miles utilized. Changes in the level of spare capacity might be an indicator of the timely availability of air freight services. For example, a shipper with a sudden need for service will be more likely to obtain an appropriate flight when spare capacity is higher. Space limitations also affect the availability of air freight services.

Domestic Freight Aviation	Jul-00	Jul-01
Available ton-miles (billions)	3.34	3.44
<i>Percent change from same month previous year</i>	2.10	3.06
Unused ton-miles (billions)	2.26	2.49
<i>Percent change from same month previous year</i>	4.97	10.21
Revenue ton-miles (billions)	1.08	0.95
<i>Percent change from same month previous year</i>	-3.45	-11.96

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

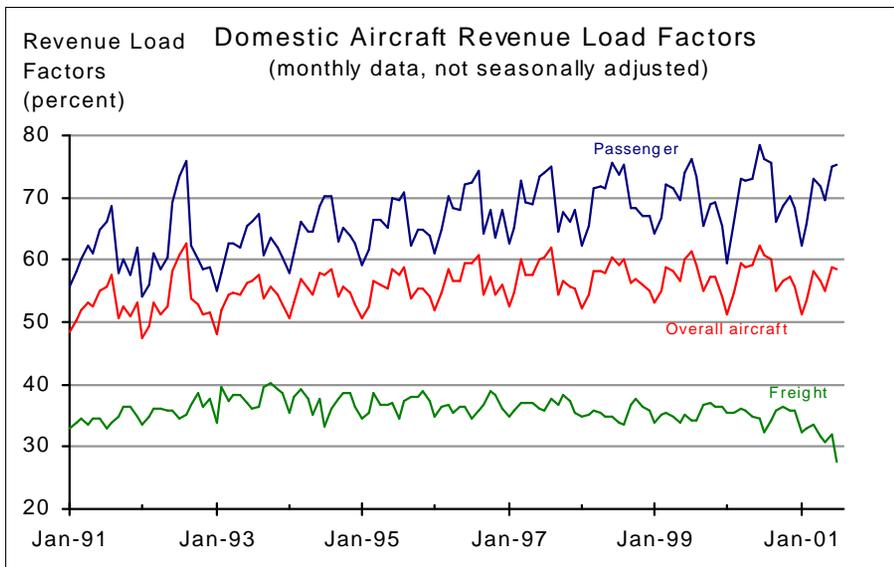
A revenue ton-mile is equal to one ton carried one mile and measures utilization of air-freight services. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

For those planes that carry both freight and passengers, available freight ton-miles are calculated by subtracting available seat-miles times 0.1 from total available ton-miles. The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month). These indicators are components of freight and overall aircraft load factors displayed in "Aircraft Capacity Utilization—Passengers and Freight."

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2001.



**AIRCRAFT CAPACITY UTILIZATION – PASSENGERS AND FREIGHT**



Aircraft load factors are used to measure aircraft in-flight capacity utilization.

Revenue Load Factors (percent)	Jul-00	Jul-01
Passenger revenue load factor	76.21	75.31
<i>Change from same month previous year</i>	<i>0.12</i>	<i>-0.90</i>
Overall aircraft revenue load factor	60.82	58.51
<i>Change from same month previous year</i>	<i>-0.41</i>	<i>-2.31</i>
Freight revenue load factor	32.25	27.55
<i>Change from same month previous year</i>	<i>-1.85</i>	<i>-4.70</i>

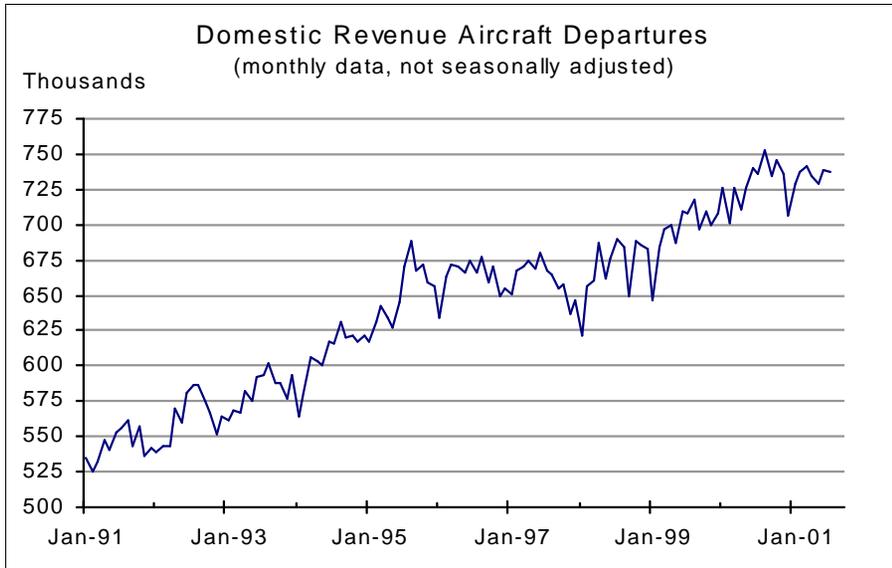
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Load factor relates to the potential capacity of a system relative to its actual performance. In order to combine passenger and freight to calculate overall aircraft load factors, a common metric is needed: ton-miles. Thus, it is assumed that a passenger plus baggage weighs 200 pounds. The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2001.



FLIGHT AVAILABILITY



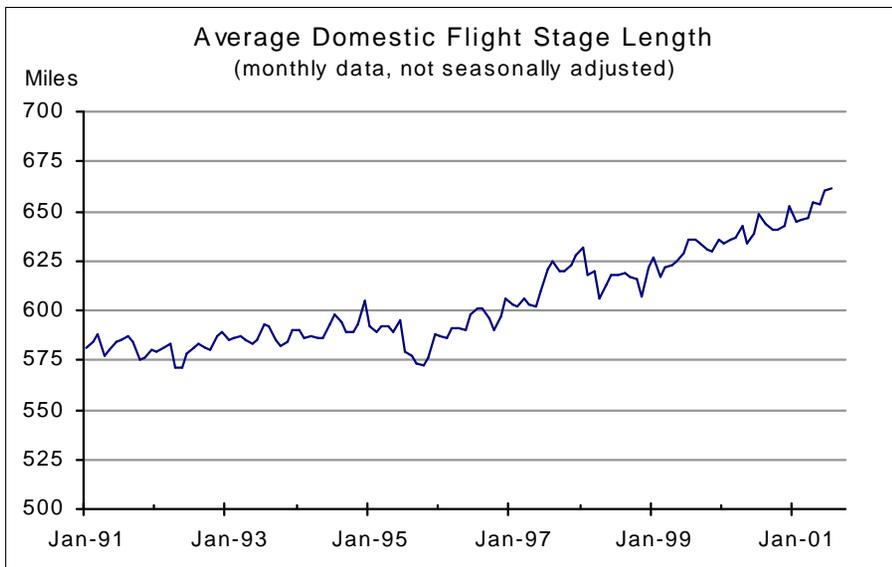
Domestic Flight Availability	Jul-00	Jul-01
Revenue aircraft departures (thousands)	737	737
Percent change from same month previous year	4.09	0.05
Flight stage length (miles)	648	662
Percent change from same month previous year	1.98	2.07

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2001



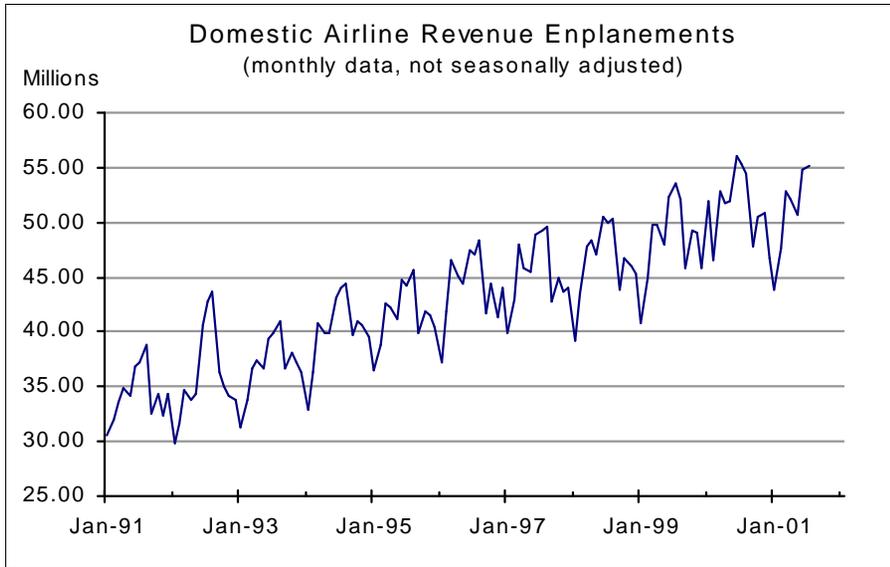
Frequency of aircraft departures, the number of connections required for a single trip, and the match between available flights and travelers' desired origin and destination points are all important determinants of scheduling convenience. Because data on connections are currently not available in a suitable format, flight stage length is used here to supplement the information on departures.

Flight stage length is the distance between take-off airport and landing airport. If the mix of origin and destination points are held constant, then an increase in flight stage length implies fewer connections are required for a trip and, therefore, higher quality of air passenger services.

The key relation is that departures and flight stage length will tend to move in opposite directions when changes are due to changes in the number of connections. For example, a trip from city A to city B with a connection in city C will have two departures, but generally a shorter average flight stage length, than the direct flight from A to B with a single departure.



ENPLANEMENTS



Revenue enplanements, the number of passengers boarding aircraft, indicate the demand for gate and luggage services. Enplanements differ from the number of trips because passengers may board more than one flight between their origination point and ultimate destination.

Domestic Passenger Aviation	Jul-00	Jul-01
Revenue aircraft enplanements (millions)	55.41	55.10
Percent change from same month previous year	3.68	-0.57

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

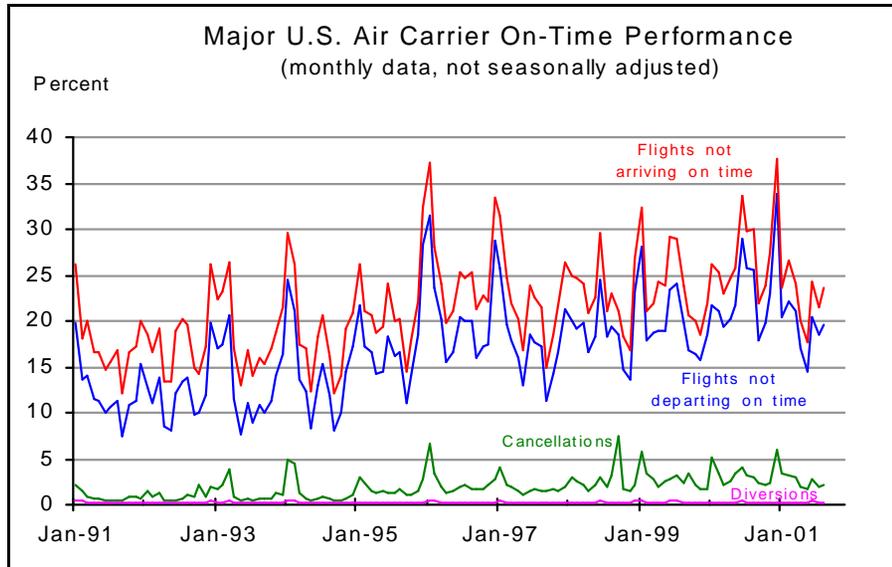
The data have been adjusted to have a standard 30-day month by multiplying the data for each month by the ratio: 30/(actual days in month).

The data do not include international flights by U.S. domestic carriers or domestic flights by foreign carriers.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, *Air Carrier Traffic Statistics Monthly*, July 2001



MAJOR U.S. AIR CARRIER ON-TIME PERFORMANCE



The number of flights not departing or arriving on time, cancellations, and diversions are measures of service quality.

These indicators are strongly seasonal and are affected by weather and heavy demand in winter and summer months, respectively.

On-Time Performance	Aug-00	Aug-01
Number of scheduled flights	491,366	494,615
<i>Percent change from same month previous year</i>	2.46	0.66
Percent of flights not arriving on time	30.04	23.53
<i>Change from same month previous year</i>	6.15	-6.51
Percent of flights not departing on time	25.44	19.66
<i>Change from same month previous year</i>	5.67	-5.78
Percent of cancelled flights*	3.05	2.20
<i>Change from same month previous year</i>	0.61	-0.85
Percent of diverted flights**	0.28	0.30
<i>Change from same month previous year</i>	0.05	0.02

\* Also counted in flights not arriving or departing on time.

\*\* Also counted in flights not arriving on time.

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

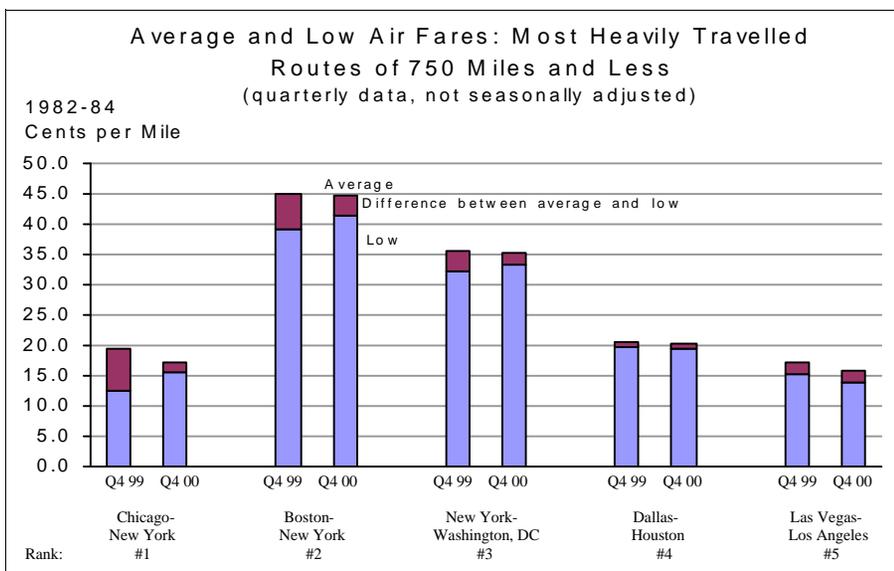
The data cover the 10 largest U.S. air carriers. A scheduled operation consists of any nonstop segment of a flight. The term "late" is defined as 15 minutes after the scheduled departure or arrival time. A cancelled flight is one that was not operated but was listed in a carrier's computer reservation system within seven calendar days of the scheduled departure. A diverted flight is one that left from the scheduled departure airport but flew to a destination point other than the scheduled destination point.

Data for Aloha Airlines, available beginning in October 2000, and for American Eagle, available beginning in January 2001, will be excluded here until one year's data is available to retain comparability with previous years.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics, Airline Service Quality Performance data.



**AIR FARES AND PASSENGER VOLUME FOR THE TOP FIVE MAJOR SHORT ROUTES**



NOTE: Blue portion of bar = lowest average fare for an airline meeting the criteria in the text.  
 Red portion of bar = the difference between the average fare for all airlines, and the lowest average fare airline.  
 Blue + red portions of bar = the average fare for the market.

Passenger air fares are a measure of the price of air travel between cities. Major short routes consist of the top five routes of 750 miles and less by number of passengers for the most recent quarter. Large markets consist of the top 1,000 passenger markets at all distances, plus routes that have previously achieved this distinction. Low fares are the lowest average fare for an airline serving at least 10 percent of passengers in the market, or the airline with the lowest average fare, if there is only one airline with at least a 10 percent share.

In the fourth quarter of 2000, there were **539** large-market routes of 750 miles or less.

Consumer air fares (less than 750 miles)	Q4 99	Q4 00	% Change
<b>Chicago-New York (728 miles)</b>			
Average Fare (1982-84 4/mile)	17.31	19.34	11.74
Low Fare (1982-84 4/mile)	15.43	12.39	-19.68
Daily Passengers	7,336	7,304	-0.44
<b>Boston-New York (185 miles)</b>			
Average Fare (1982-84 4/mile)	44.65	45.04	0.86
Low Fare (1982-84 4/mile)	41.44	39.14	-5.56
Daily Passengers	7,096	6,883	-3.00
<b>New York-Wash DC (215 miles)</b>			
Average Fare (1982-84 4/mile)	35.27	35.55	0.78
Low Fare (1982-84 4/mile)	33.32	32.34	-2.96
Daily Passengers	6,342	5,889	-7.14
<b>Dallas-Houston (236 miles)</b>			
Average Fare (1982-84 4/mile)	20.15	20.45	1.52
Low Fare (1982-84 4/mile)	19.39	19.72	1.71
Daily Passengers	5,444	5,421	-0.42
<b>Las Vegas-L.A. (236 miles)</b>			
Average Fare (1982-84 4/mile)	15.86	17.29	8.96
Low Fare (1982-84 4/mile)	13.85	15.34	10.75
Daily Passengers	5,469	4,782	-12.56

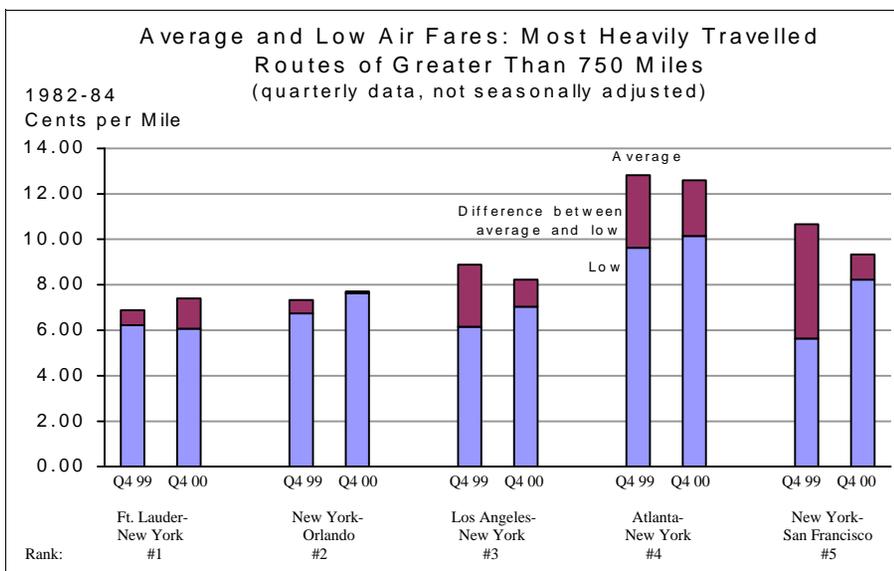
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Average fares are based on the one-way cost for all paying customers and exclude passengers that fly for free such as those using a frequent flyer program. City-pairs include all airports in each city.

SOURCE: U.S. Department of Transportation: Bureau of Transportation Statistics, and Office of the Assistant Secretary for Aviation and International Affairs, and <http://ostpxweb.ost.dot.gov/aviation/>.



**AIR FARES AND PASSENGER VOLUME FOR THE TOP FIVE MAJOR LONG ROUTES**



NOTE: Blue portion of bar = lowest average fare for an airline meeting the criteria in the text.  
 Red portion of bar = the difference between the average fare for all airlines, and the lowest average fare airline.  
 Blue + red portions of bar = the average fare for the market.

Major long routes consist of the top five routes of more than 750 miles by number of passengers for the most recent quarter. In the fourth quarter of 2000, there were **749** large-market routes of more than 750 miles.

Consumer air fares (greater than 750 miles)	Q4 99	Q4 00	% Change
<b>Ft. Lauderdale-New York (1072 miles)</b>			
Average Fare (1982-84 4/mile)	7.37	6.86	-6.95
Low Fare (1982-84 4/mile)	6.10	6.22	1.96
Daily Passengers	6,561	8,497	29.51
<b>New York-Orlando (944 miles)</b>			
Average Fare (1982-84 4/mile)	7.68	7.37	-4.11
Low Fare (1982-84 4/mile)	7.62	6.76	-11.30
Daily Passengers	6,368	7,365	15.66
<b>L.A.-New York (2469 miles)</b>			
Average Fare (1982-84 4/mile)	8.23	8.87	7.71
Low Fare (1982-84 4/mile)	7.05	6.17	-12.55
Daily Passengers	7,340	6,815	-7.15
<b>Atlanta-New York (755 miles)</b>			
Average Fare (1982-84 4/mile)	12.58	12.79	1.66
Low Fare (1982-84 4/mile)	10.14	9.67	-4.69
Daily Passengers	6,793	6,768	-0.37
<b>New York-San Fran (2578 miles)</b>			
Average Fare (1982-84 4/mile)	9.32	10.63	14.11
Low Fare (1982-84 4/mile)	8.26	5.62	-31.97
Daily Passengers	5,713	5,161	-9.66

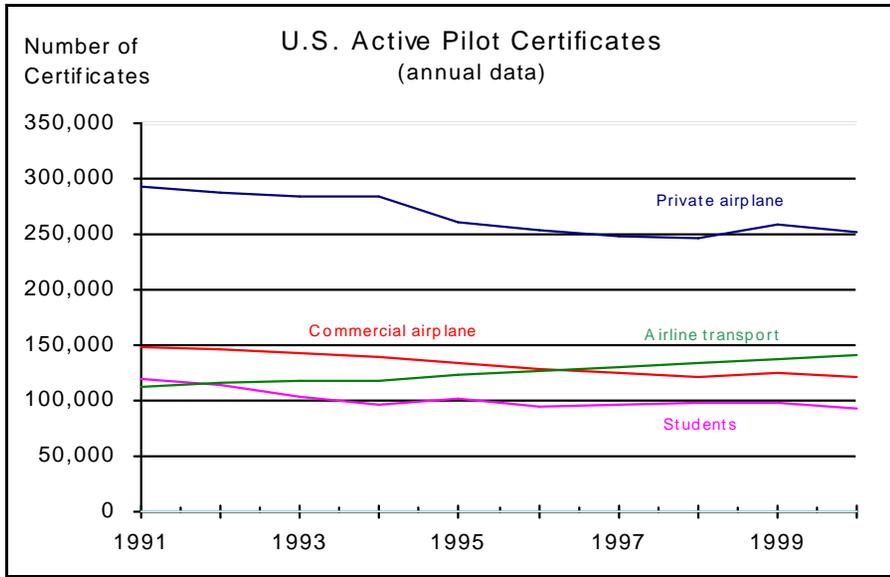
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Average fares are based on the one-way cost for all paying customers and exclude passengers that fly for free such as those using a frequent flyer program. City-pairs include all airports in each city.

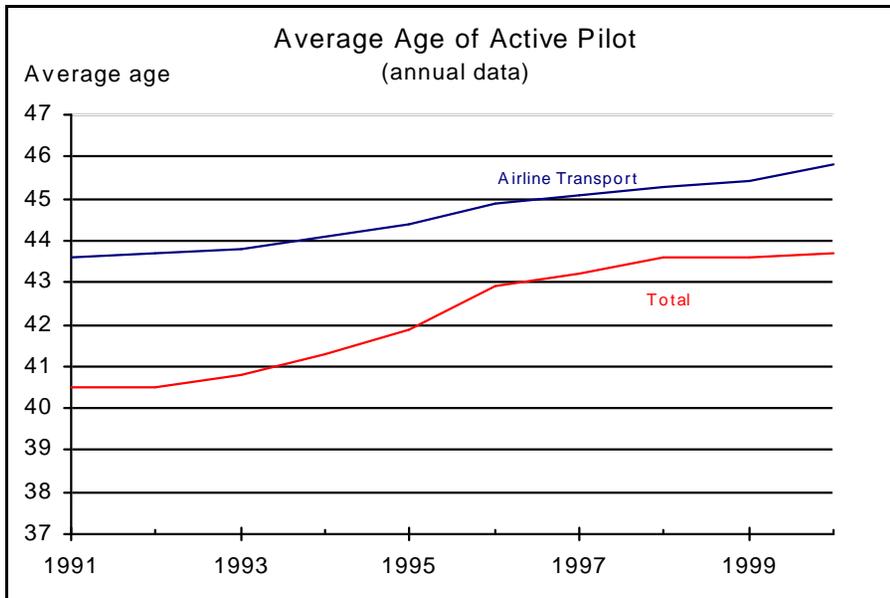
SOURCE: U.S. Department of Transportation: Bureau of Transportation Statistics, and Office of the Assistant Secretary for Aviation and International Affairs, and <http://ostpxweb.ost.dot.gov/aviation/>.



U.S. Active Pilots



Number of Active Pilot Certificates	1999	2000
Private Airplane	258,749	251,561
<i>Percent change from previous year</i>	4.66	-2.78
Airline Transport	137,642	141,596
<i>Percent change from previous year</i>	2.25	2.87
Commercial Airplane	124,261	121,858
<i>Percent change from previous year</i>	1.81	-1.93
Students	97,359	93,064
<i>Percent change from previous year</i>	-0.39	-4.41



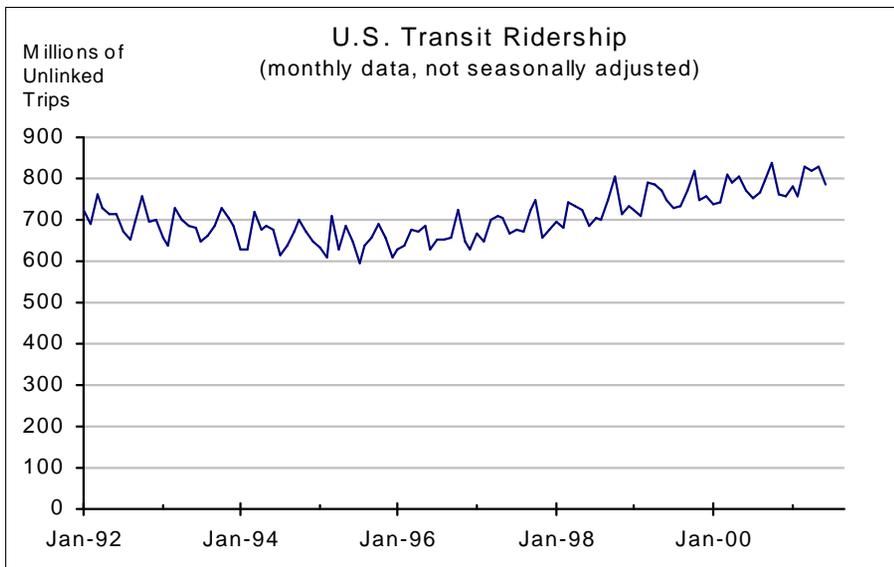
Average Age of U.S. Pilots	1999	2000
Airline Transport	45.4	45.8
<i>Percent change from previous year</i>	0.22	0.88
Total Pilots	43.6	43.7
<i>Percent change from previous year</i>	0	0.23

SOURCE: U.S. Department of Transportation, Federal Aviation Administration, Aviation Policy and Plans, available at: <http://www.api.faa.gov/civilair/Doclist.asp?ID=33>

NOTES: Airline Transport pilot– for aircraft engaged in air carrier service.  
 Commercial airplane pilot– for aircraft carrying passengers for compensation or hire or for aircraft that is being operated for compensation or hire.  
 Private airplane pilot– may not as as pilot-in-command of a/c that is carrying passengers for compensation or hire nor act as pilot-in-command in an a/c operated for compensation or hire.



**PUBLIC TRANSIT**



Public transportation includes transit bus, transit rail, commuter rail, trolleys, and several demand-responsive services.

Transit Ridership	Jun-00	Jun-01
Unlinked trips (in thousands)	770,455	784,061
<i>Percent change from same month previous year</i>	2.92	1.77

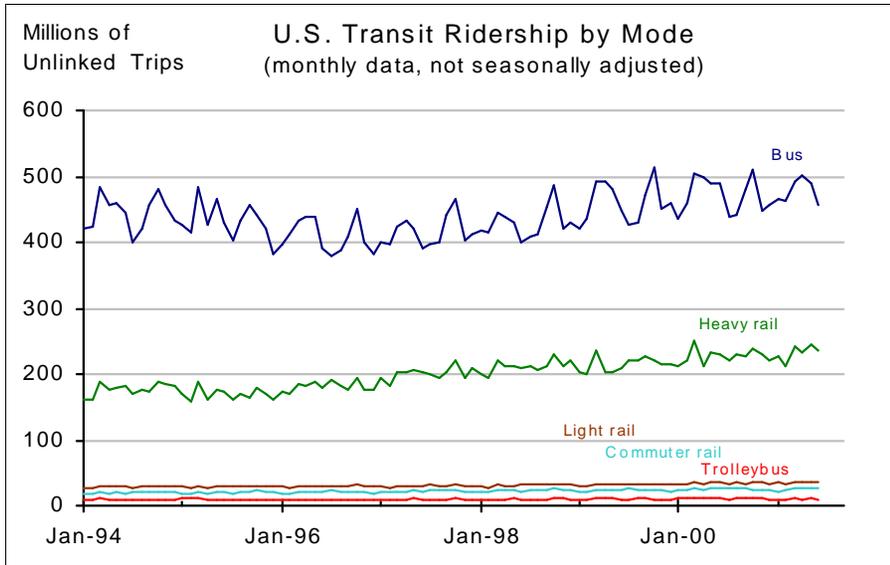
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

According to the American Public Transportation Association (APTA), an unlinked transit trip is a trip on one transit vehicle. A person riding one vehicle from origin to destination takes one unlinked trip; a person who transfers to a second vehicle takes two unlinked trips; a person who transfers to a third vehicle takes three unlinked trips. APTA estimates that the number of people riding transit on an average weekday is 45 percent of the number of unlinked transit passenger trips.

SOURCE: American Public Transportation Association, *APTA Quarterly Transit Ridership Report*, available at: <http://www.apta.com/stats/ridership/index.htm>



PUBLIC TRANSPORTATION BY MODE



Ridership of heavy rail has been climbing faster than any other mode of public transportation. Bus ridership is almost 60 percent of total transit ridership.

Transit Ridership by Mode	Jun-00	Jun-01
Bus (thousands)	489,792	457,272
<i>Percent change from same month previous year</i>	9.18	-6.64
Heavy Rail (thousands)	231,267	236,042
<i>Percent change from same month previous year</i>	10.54	2.06
Commuter Rail (thousands)	35,238	35,113
<i>Percent change from same month previous year</i>	4.54	-0.35
Light Rail (thousands)	26,534	27,252
<i>Percent change from same month previous year</i>	8.87	2.71
Trolleybus (thousands)	11,337	9,726
<i>Percent change from same month previous year</i>	9.13	-14.21

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

According to the American Public Transportation Association (APTA), an unlinked transit trip is a trip on one transit vehicle. A person riding one vehicle from origin to destination takes one unlinked trip; a person who transfers to a second vehicle takes two unlinked trips; a person who transfers to a third vehicle takes three unlinked trips. APTA estimates that the number of people riding transit on an average weekday is 45 percent of the number of unlinked transit passenger trips.

Commuter Rail – Railroad local and regional passenger train operations between a central city, its suburbs, and/or another central city. It may either be locomotive-hauled or self-propelled, and is characterized by multitrip tickets, specific station-to-station fares, railroad employment practices, and usually only one or two stations in the central business district. Also known as “suburban rail.”

Light Rail – An electric railway with a “light volume” traffic capacity compared to “heavy rail.” Light rail may include multicar trains or single cars. Also known as “Streetcar,” “Trolley car,” and “Tramway.”

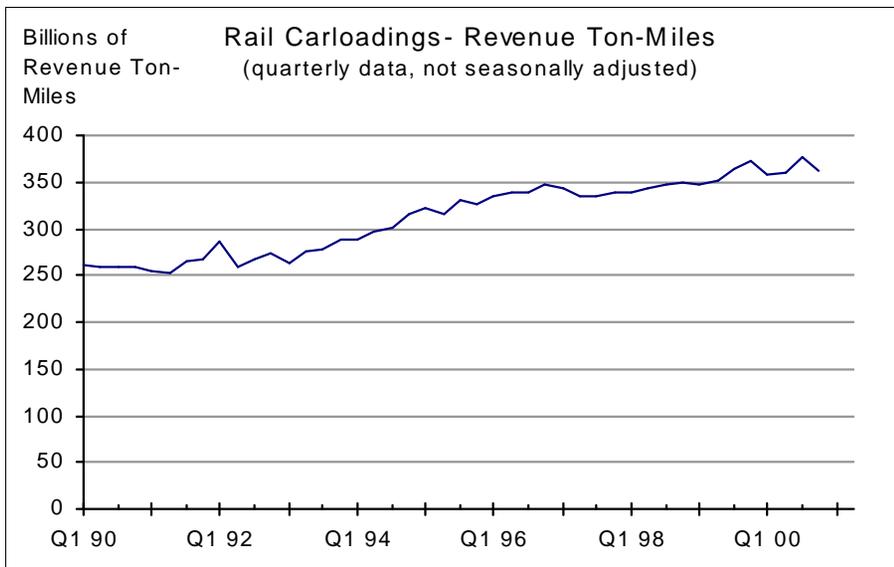
Heavy Rail – An electric railway with the capacity of “heavy volume” of traffic and characterized by exclusive rights-of-way, multicar trains, high speed and rapid acceleration, sophisticated signaling, and high platform loading.

Trolleybus – Rubber-tired passenger vehicles operating singly on city streets. Trolleybuses are propelled by electricity drawn from an overhead electric line via trolleys.

SOURCE: American Public Transportation Association, *APTA Quarterly Transit Ridership Report*, available at: <http://www.apta.com/stats>



RAIL FREIGHT



The top commodity in U.S. rail carloadings is grain, and grain carloadings declined in 2000 (Association of American Railroads, weekly railroad traffic).

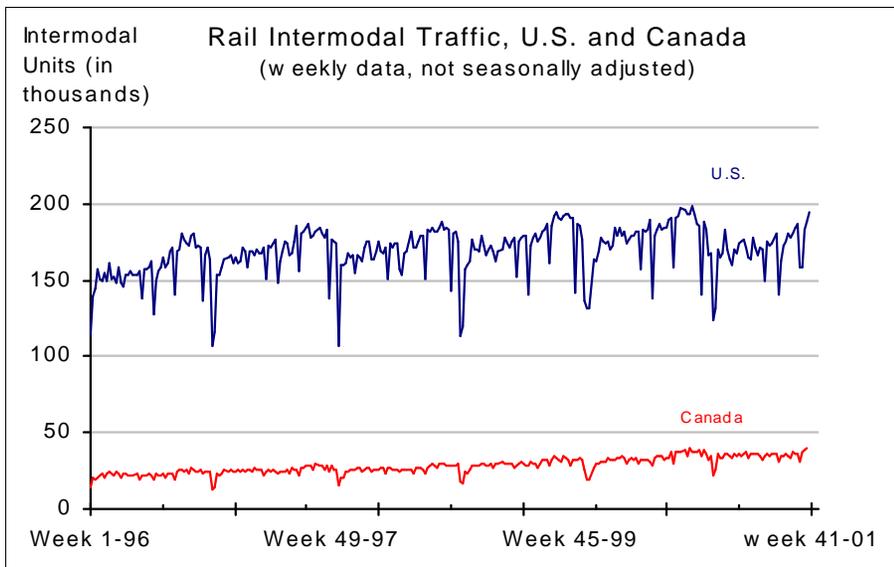
Rail Freight Revenue Ton Miles	Q4 99	Q4 00
Total (billions)	373	361
Percent change from same quarter previous year	6.49	-3.06

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCES: Association of American Railroads, *Railroad Revenues, Expenses, and Income. Class 1 Railroads in the United States*, R&E Series, and Surface Transportation Board, Office of Economics, Environmental Analysis and Administration at: <http://www.stb.dot.gov>.



WEEKLY RAIL INTERMODAL TRAFFIC



Rail intermodal traffic consists of units of trailers and containers. Increases in rail intermodal traffic have been in the number of container units.

Rail Intermodal Traffic, U.S. and Canada	Week 39-00	Week 39-01
United States	197,751	195,219
<i>Percent change from same week previous year</i>	<i>1.52</i>	<i>-1.28</i>
Canada	37,786	40,048
<i>Percent change from same week previous year</i>	<i>13.11</i>	<i>5.99</i>

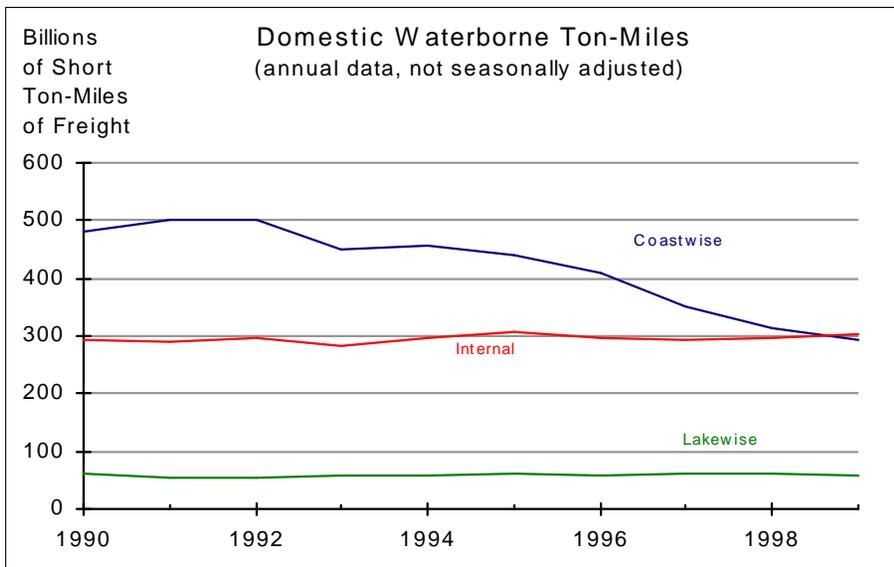
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

Traffic of Canadian railroads reflect their Canadian and U.S. operations, and the operations of their subsidiaries. U.S. traffic reflects the U.S. and Canadian operations of U.S. railroads.

SOURCE: Association of American Railroads, Policy and Communication Department, Weekly Railroad Traffic, Intermodal Traffic, Washington, DC.



DOMESTIC WATERBORNE FREIGHT



Domestic waterborne ton-miles show the level of freight flows through U.S. inland, coastal, and Great Lakes waterways. Domestic waterborne ton-miles in the coastwise trade have declined in recent years.

Petroleum and petroleum products, crude materials, and coal comprise most of the cargo moving in U.S. domestic waterborne trade.

U.S. Domestic Waterborne Freight (billion short ton-miles)	1998	1999
Internal	294.9	304.7
<i>Percent change from previous year</i>	<i>0.31</i>	<i>3.32</i>
Coastwise	314.9	292.7
<i>Percent change from previous year</i>	<i>-9.98</i>	<i>-7.05</i>
Lakewise	61.7	57.0
<i>Percent change from previous year</i>	<i>-0.80</i>	<i>-7.62</i>

NOTES: Data excludes traffic between ports in Puerto Rico and the Virgin Islands.

Coastwise—Domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, (e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, Alaska to Hawaii). Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed Coastwise.

Lakewise—Waterborne traffic between the United States ports on the Great Lakes System. The Great Lakes System is treated as a separate waterway system rather than as a part of the inland waterway system. From 1990 on, marine products, sand and gravel being moved from the Great Lakes to Great Lake destinations are classified as lakewise traffic.

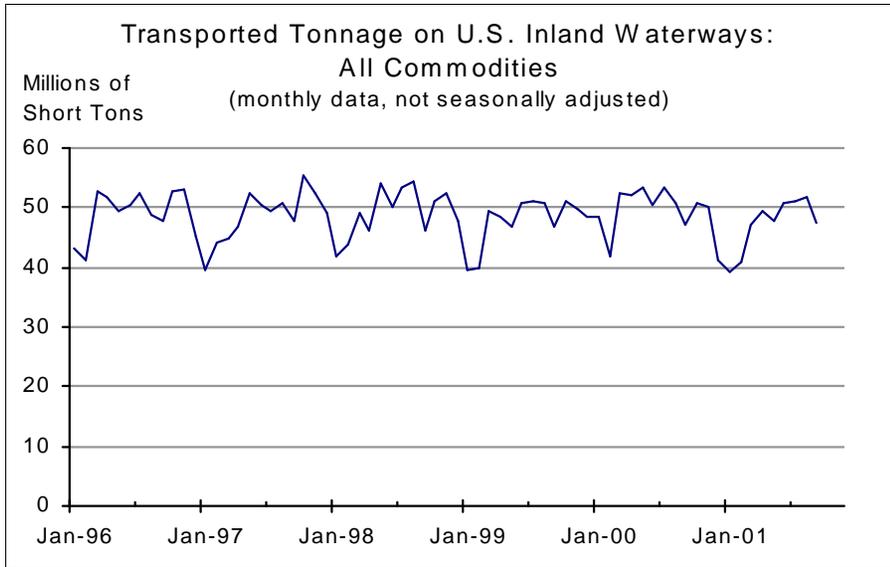
Internal—Vessel movements (origin and destination) which take place solely on inland waterways. An inland waterway is one geographically located within the boundaries of the contiguous 48 states or within the boundaries of the State of Alaska.

The term “internal traffic” is also applied to these vessel movements: those which involve carriage on both inland waterways and the Great Lakes; those occurring between offshore areas and inland waterways (e.g., oil rig supplies and fish); and those taking place within the Delaware Bay, Chesapeake Bay, Puget Sound, and the San Francisco Bay, which are considered internal bodies of water rather than arms of the ocean.

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce of the U.S. (New Orleans, LA: Annual issues), Part 5, National Summaries, table 1-4, and similar tables in earlier editions, available at <http://www.wrsc.usace.army.mil/ndc/wcsc.htm>.



U.S. INLAND WATERWAYS TRADE



Inland Waterways Commercial Tonnage	Sep-00	Sep-01
All commodities (million short tons)	47.3	47.5
Percent change from same month previous year	1.07	0.42

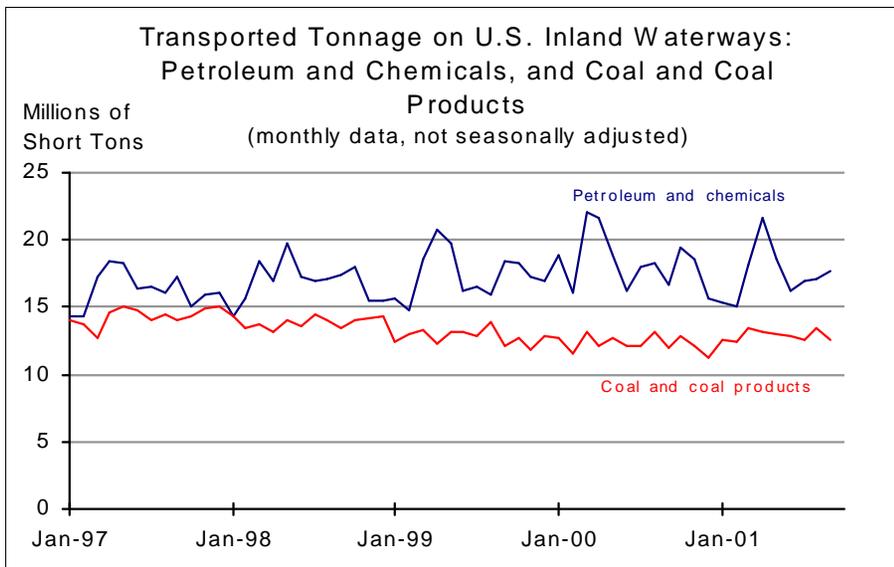
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, Monthly Indicators, available at: <http://www.wrsc.usace.army.mil/ndc/wcmthind.htm>.

Almost 60 percent of the U.S. domestic waterborne trade tonnage is moved on the inland waterways. This market consists of carriers that transport freight between U.S. ports. At least 80 percent of the tonnage in this trade is carried by barge.



**BREAKDOWN OF U.S. INLAND WATERWAYS TRADE**

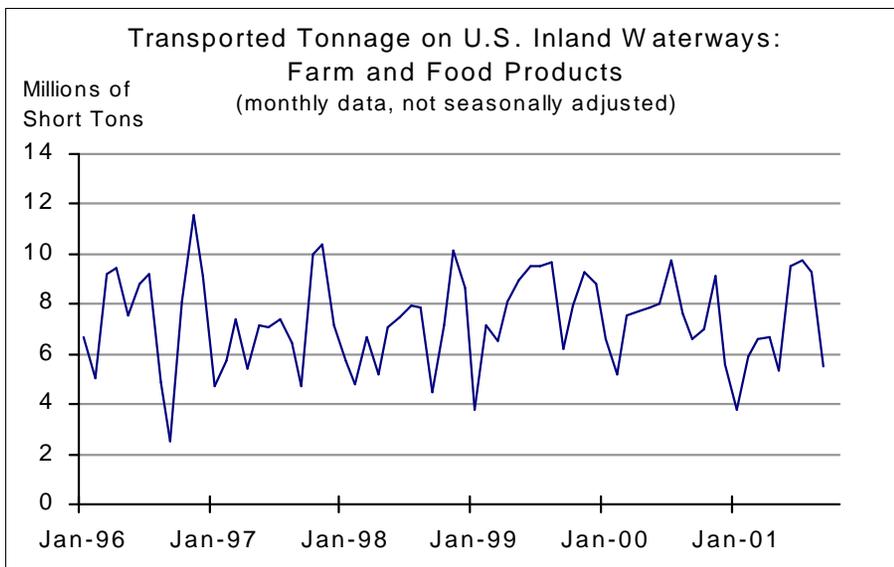


Inland Waterways Commercial Tonnage	Sep-00	Sep-01
Petroleum and chemicals (million short tons)	16.7	17.7
<i>Percent change from same month previous year</i>	-9.24	5.99
Coal and coal products (million short tons)	12.0	12.6
<i>Percent change from same month previous year</i>	-1.64	5.00
Farm and food products (million short tons)	6.6	5.5
<i>Percent change from same month previous year</i>	6.94	-16.44

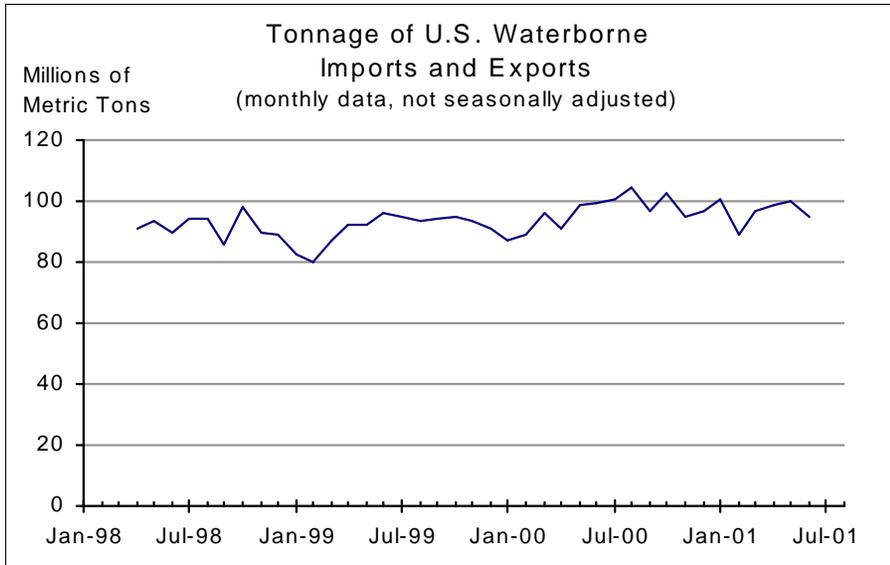
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce Statistics Center, Monthly Indicators, available at: <http://www.wrsc.usace.army.mil/ndc/monthlyindicators.htm>.

Petroleum and chemicals, coal and coal products, and farm and food products make up the vast majority of U.S. inland waterways trade tonnage. In September 2001, these commodities constituted nearly 75 percent of total inland waterway trade.



**U.S. FOREIGN WATERBORNE FREIGHT**



U.S. International Freight	Jun-00	Jun-01
Total waterborne metric tons (thousands)	99,498	94,624
Percent change from same month previous year	3.71	-4.90

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

A metric ton is equal to 2,204.6 pounds.

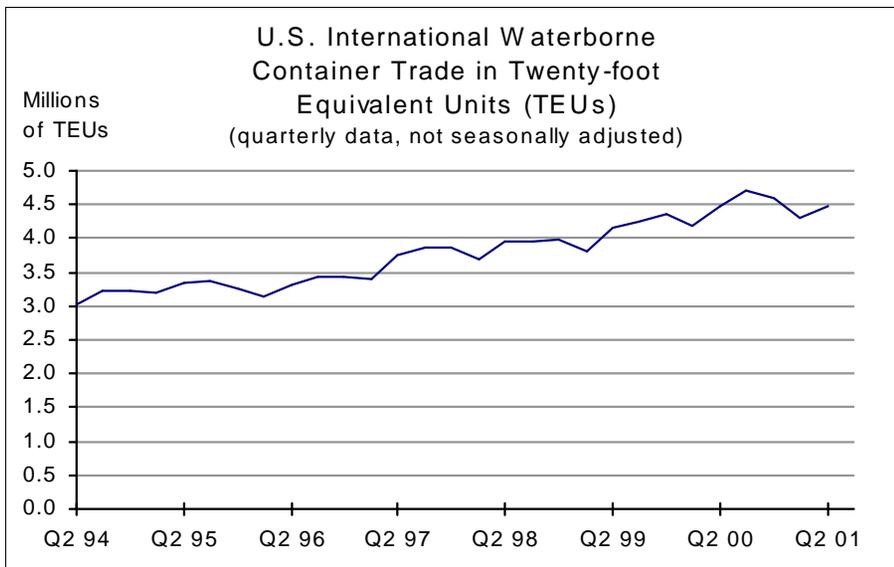
SOURCE: U.S. Department of Transportation, Maritime Administration, Office of Statistical and Economic Analysis, U.S. Foreign Waterborne Transportation Statistics data, available at: <http://www.marad.dot.gov/statistics/usfwts/index.html>.

Import and export tonnage helps identify the volume of cargo flowing through U.S. ports and the resulting vessel traffic on U.S. coastal waters. It also helps identify needs for intermodal truck and rail traffic.

Most U.S. coastal ports handle both foreign and domestic cargoes.



CONTAINER TRAFFIC VOLUME



U.S. International Container Traffic	Q2 00	Q2 01
Total waterborne TEUs (thousands)	4,479	4,482
Percent change from same quarter previous year	7.77	0.08

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

A twenty-foot-equivalent unit (TEU) is the total length of the container divided by 20. A 48-foot container equals 2.4 TEUs.

SOURCE: Journal of Commerce, Port Import/Export Reporting Service (PIERS) data.

International waterborne container traffic, measured in twenty-foot equivalent units (TEUs), helps identify container traffic trends affecting ports and related intermodal freight demand.

The majority of container traffic involves manufactured goods.

Container transportation is very concentrated and competitive. The top 25 U.S. ports handle more than 90 percent of U.S. container traffic.

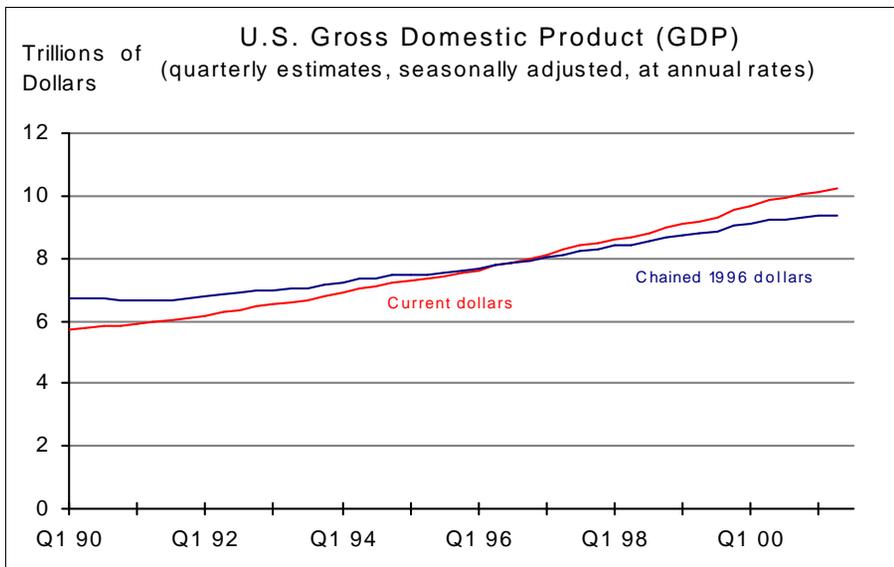


# Economic Growth

	Page		Page
Growth in Gross Domestic Product	41	Breakdown of Private Industry Employment Costs	64
Personal Spending on Transportation	42	Employment Costs for Transportation Industries	65
Prices of Transportation Services Paid By American Households	43	Employment Costs in Transportation Occupations	66
Consumer Prices for Transportation	44	Transportation Industry Profit and Income	67
Producer Prices of Key Transportation Inputs	45	Air Carrier Real Operating Expenses and Breakdown of Operating Revenues	68
Producer Prices of For-Hire Transportation Services	46	Air Carrier Real Return on Assets	69
Producer Prices for Transportation Equipment	47	Productivity Growth	70
Producer Prices of Air Transportation Services	48	Railroad Labor Productivity	71
Producer Prices of Railroad Transportation Services	49	Retail Sales and Transportation Demand	72
Producer Prices of Railroad Equipment	50	Level of Manufacturing Inventory	73
Producer Prices of Equipment and Repair Services for Water Transportation	51	New Orders—All Manufacturing	74
Producer Prices of Highway and Street Construction	52	New Orders—Transportation Equipment	75
Public Expenditures on Construction of Highways and Streets	53	Business Investment in Transportation Equipment	76
Unemployment Rate	54	Retail Sales of Motor Vehicles	77
Transportation Employment	55	World Crude Oil Prices	78
For-Hire Transportation Employment	56	Motor Fuel Prices	79
Transportation Supporting Industry Employment	57	Retail Gasoline Prices of Selected Metropolitan Areas, September 2001 (map)	80
Hourly Earnings of Production Workers in Transportation Industries	58	Regional Retail Motor Fuel Prices as of October 15, 2001 (map)	81
Hourly Earnings of Pipeline and Water Transportation Workers	59	Domestic Unit Prices for Airline Jet Fuel	82
Hourly Earnings of Workers in Transportation Arrangement Services	60	Value of U.S. Imports and Exports	83
Hourly Earnings of Workers in Trucking and Public Warehousing Services	61	Value Per Metric Ton of U.S. International Waterborne Imports and Exports	84
Hourly Earnings of Rail, Bus, and Transit Workers	62	U.S. Surface Trade with Canada and Mexico	85
Transportation and Private Industry Employment Costs	63	Value of Transportation-Related Imports	86
		Value of Transportation-Related Exports	87



GROWTH IN GROSS DOMESTIC PRODUCT

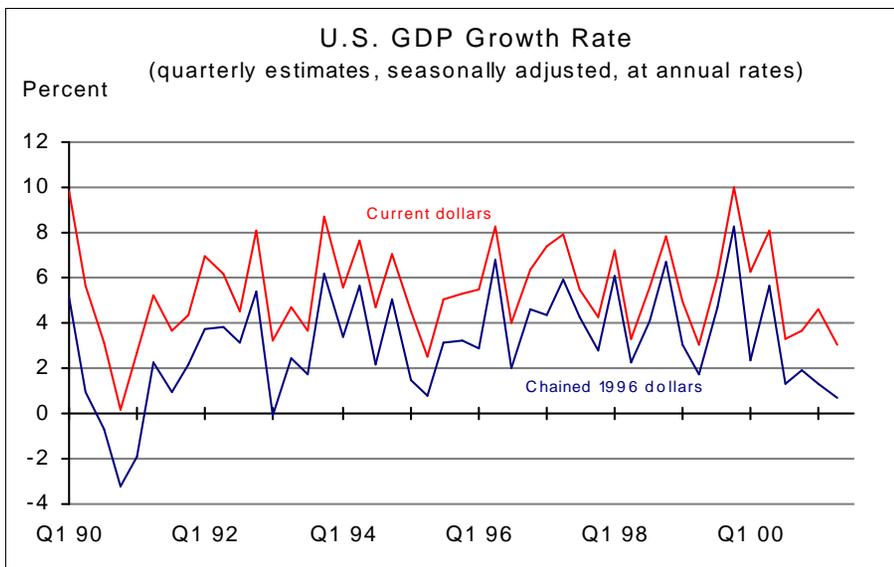


U.S. Gross Domestic Product	Q1 01	Q2 01
Billions of current dollars	10,142	10,218
<i>Percent change from previous quarter</i>	1.13	0.75
Billions of chained 1996 dollars	9,335	9,352
<i>Percent change from previous quarter</i>	0.33	0.18

NOTES: Quarterly GDP data are presented at an annual rate.

Chained 1996 dollars are calculated using chain-type indices, rather than constant dollars, to measure real GDP. The chain-type method first calculates the real changes between adjacent years. Annual rates of real changes are then chained (multiplied) together to obtain the rate of real changes between nonadjacent years. Chained dollars are preferable to constant dollars, which merely reflect overall price inflation, because chained dollars capture the effect of changes in the components of GDP.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Products Accounts Data, September 17, 2001, available at: <http://www.bea.doc.gov/bea/dn1.htm>.

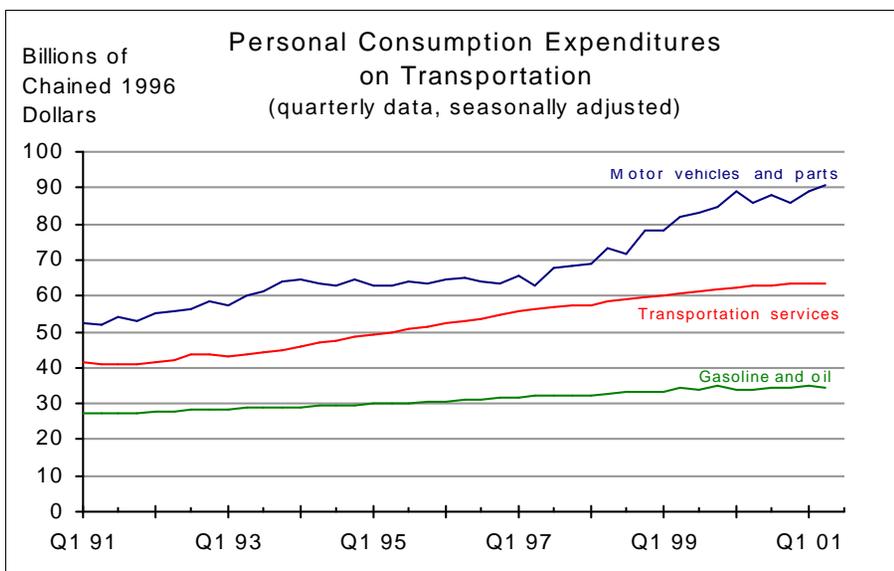
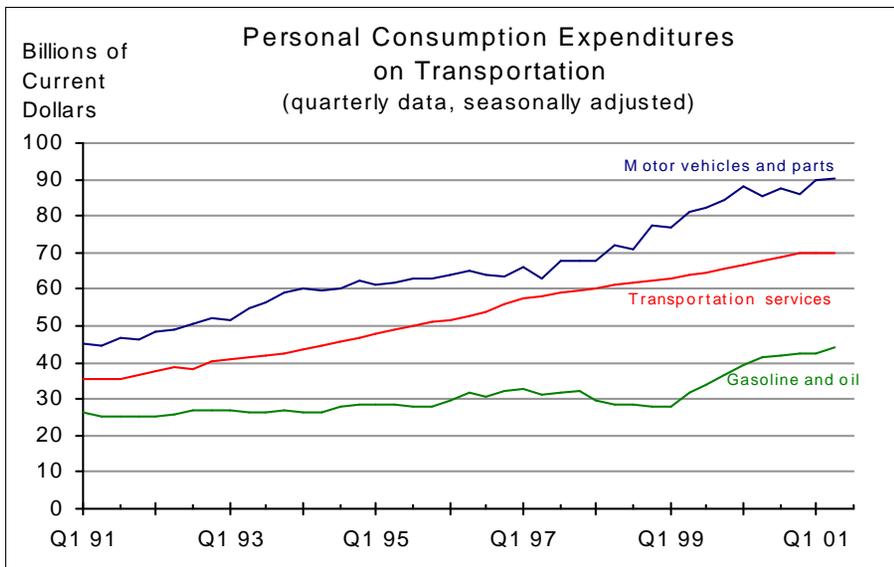


Gross Domestic Product (GDP) growth affects new demand for transportation services. GDP has grown in real terms in every quarter since 1993.

GDP is the net output of goods and services produced by labor and property located in the United States. Real GDP is expressed in chained 1996 dollars.



PERSONAL SPENDING ON TRANSPORTATION



Personal Consumption Expenditures (billions of current dollars)	Q1 01	Q2 01
Motor vehicles and parts	89.65	90.58
<i>Percent change from previous quarter</i>	4.49	1.03
Transportation services	70.13	69.95
<i>Percent change from previous quarter</i>	0.61	-0.25
Gasoline and oil	42.38	44.33
<i>Percent change from previous quarter</i>	-0.35	4.60

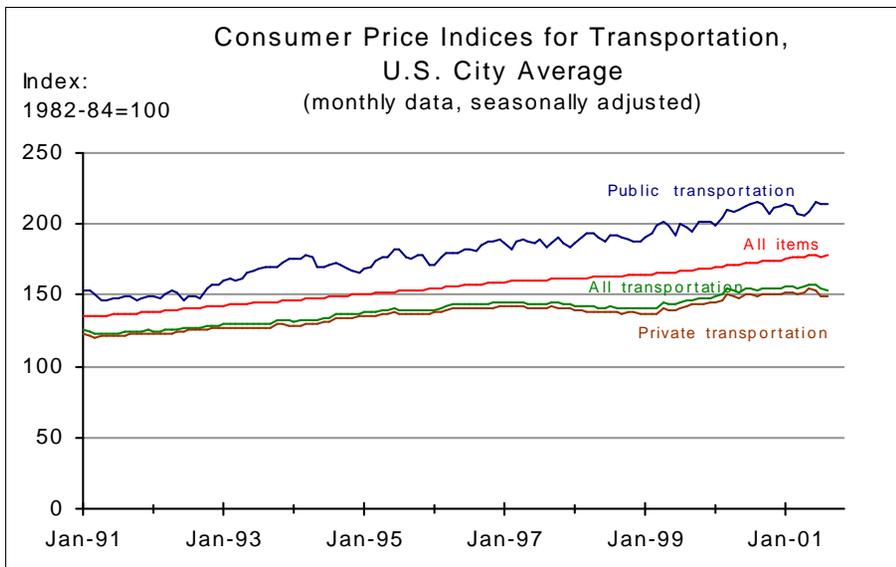
Personal Consumption Expenditures (billions of chained 1996 dollars)	Q1 01	Q2 01
Motor vehicles and parts	89.25	90.48
<i>Percent change from previous quarter</i>	3.81	1.37
Transportation services	63.60	63.55
<i>Percent change from previous quarter</i>	0.24	-0.08
Gasoline and oil	34.73	34.43
<i>Percent change from previous quarter</i>	1.24	-0.86

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, estimates based on *Survey of Current Business*, August 2001, NIPA Tables 2.2 and 2.3.

Personal expenditures on transportation are a measure of consumer demand for transportation services. Since expenditures are the product of quantity and price, these expenditures are also influenced by changes in the prices of transportation-related goods and services. To show the “real” changes in demand for transportation services over time, the expenditures are also presented in chained 1996 dollars. The traditional constant dollar measure is different from the chained dollar measure in that chained dollars gets rid of the effects of short-term price shocks, in addition to general inflation effects. Therefore, expenditures measured in chained 1996 dollars reflect changes in quantities. For items with volatile prices, such as gasoline, changes in chained dollar expenditure over time can be very different from changes in current dollar expenditures.



PRICES OF TRANSPORTATION SERVICES PAID BY AMERICAN HOUSEHOLDS



The Consumer Price Index (CPI) tracks the price of a market basket of goods and services purchased by U.S. households over time. Both monthly and annual changes are reported in the tables for the CPI in order to facilitate comparison with other series.

NOTE: 1982-1984=100: The consumer price index for a specific item is a weighted average of the prices for the individual components of the item. The weights are determined by the expenditure shares of the individual components based on a survey of consumer expenditure during the base year(s). The base year price is then normalized to 100. For some items, the Bureau of Labor Statistics establishes weights using several years of consumer expenditure surveys in order to smooth out the effects of short-term price shocks and of the business cycle. Weights formed using several years will give a more accurate measure of typical consumer expenditure patterns.

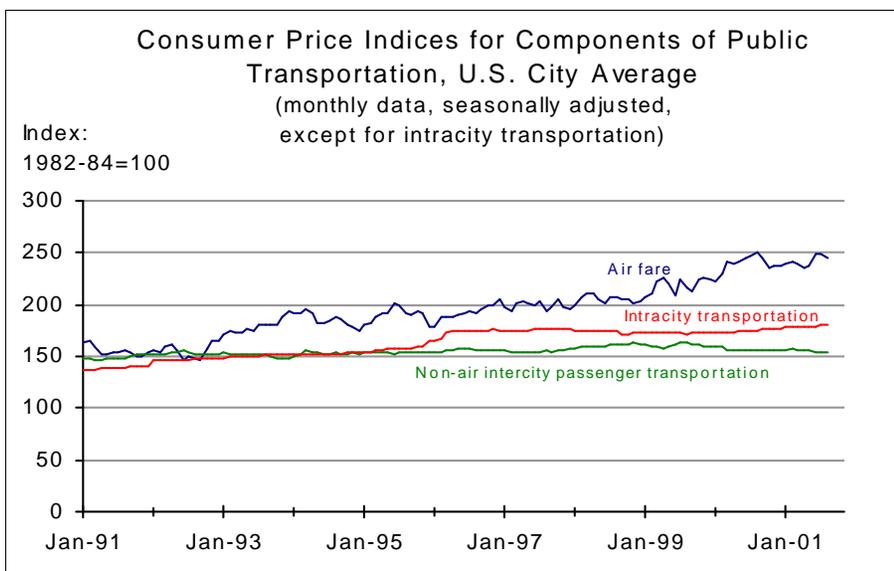
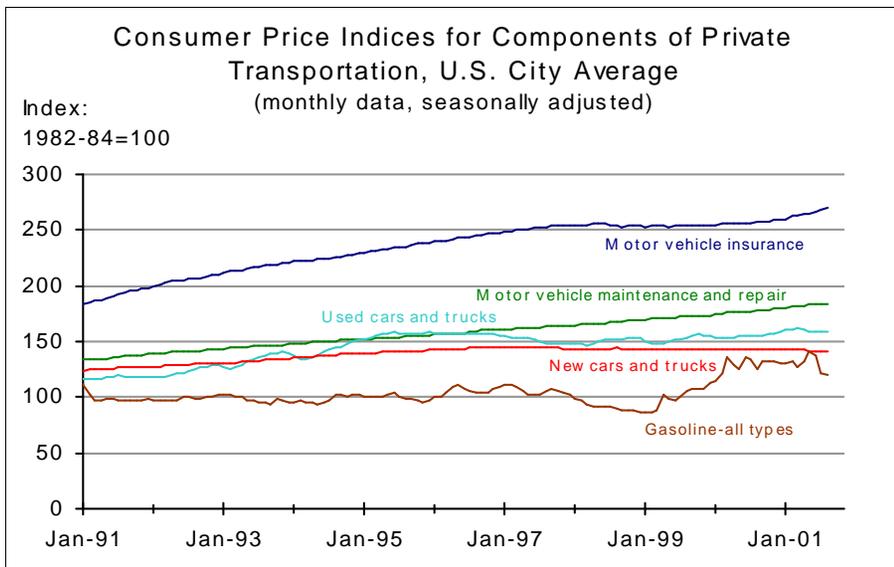
Price Index (1982-84=100)	Jul-01	Aug-01
Public transportation	213.6	213.9
<i>Percent change from previous month</i>	-1.11	0.14
All items	177.4	177.5
<i>Percent change from previous month</i>	-0.28	0.06
All transportation	154.1	153.4
<i>Percent change from previous month</i>	-2.28	-0.45
Private transportation	149.8	149.1
<i>Percent change from previous month</i>	-2.35	-0.47

Price Index (1982-84=100)	Aug-00	Aug-01
Public transportation	215.8	213.9
<i>Percent change from same month previous year</i>	9.49	-0.88
All items	172.8	177.5
<i>Percent change from same month previous year</i>	3.35	2.72
All transportation	153.3	153.4
<i>Percent change from same month previous year</i>	5.14	0.07
Private transportation	148.9	149.1
<i>Percent change from same month previous year</i>	4.79	0.13

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/cpihome.htm>.



CONSUMER PRICES FOR TRANSPORTATION



Price Index (1982-84=100)	Jul-01	Aug-01
Motor vehicle insurance	268.7	269.7
<i>Percent change from previous month</i>	<i>0.64</i>	<i>0.37</i>
Motor vehicle maintenance and repair	183.6	184.1
<i>Percent change from previous month</i>	<i>0.38</i>	<i>0.27</i>
Used cars and trucks	158.3	158.0
<i>Percent change from previous month</i>	<i>-0.38</i>	<i>-0.19</i>
New cars and trucks	141.8	141.5
<i>Percent change from previous month</i>	<i>0.00</i>	<i>-0.21</i>
Gasoline all-types	122.1	119.2
<i>Percent change from previous month</i>	<i>-11.01</i>	<i>-2.38</i>
Airfare	248.8	244.3
<i>Percent change from previous month</i>	<i>-0.20</i>	<i>-1.81</i>
Intracity transportation (not seasonally adjusted)	180.5	181.1
<i>Percent change from previous month</i>	<i>0.67</i>	<i>0.33</i>
Non-air intercity passenger transportation	153.8	154.0
<i>Percent change from previous month</i>	<i>-0.58</i>	<i>0.13</i>

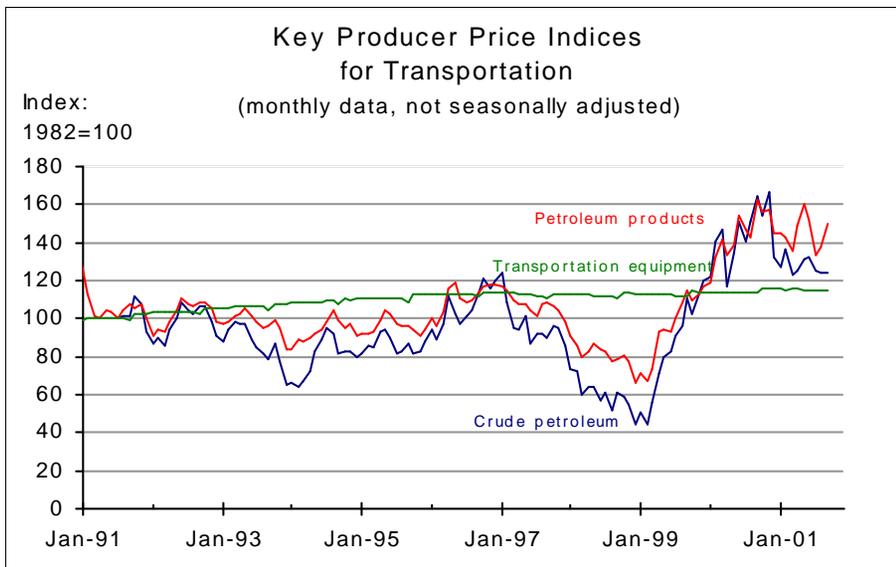
NOTE: Other Intercity passenger transportation consists of Amtrak, commuter rail, buses, and other for-hire nonair modes of transportation between urban areas.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/cpihome.htm>.

The transportation component index of the CPI shows changes in transportation prices for consumers, and includes motor vehicle insurance, maintenance and repair, used and new cars and trucks, gasoline (all types), air fare, and intercity transportation.



PRODUCER PRICES OF KEY TRANSPORTATION INPUTS

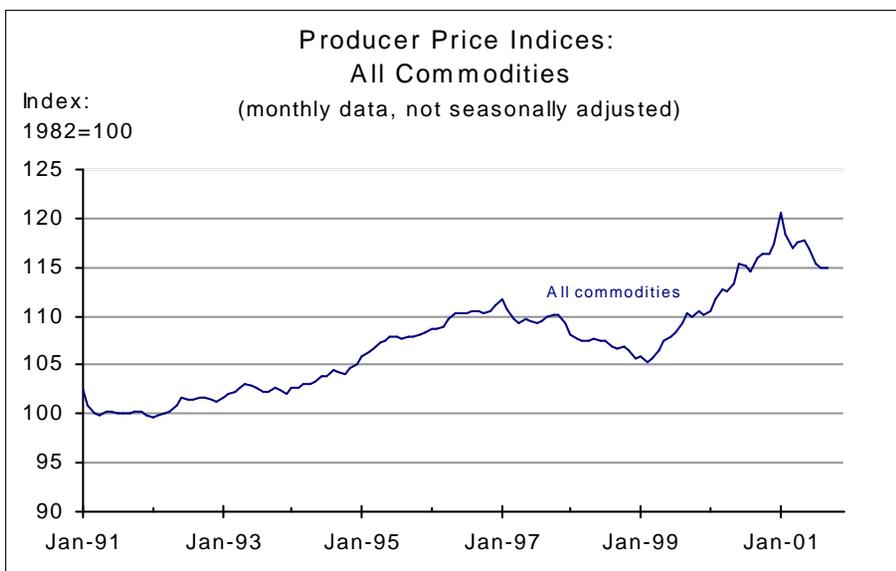


Price Index (1982=100)	Sep-00	Sep-01
Petroleum products	161.9	150.2
<i>Percent change from same month previous year</i>	41.38	-7.22
Crude Petroleum	164.2	124.6
<i>Percent change from same month previous year</i>	48.70	-24.13
All commodities	116.0	114.9
<i>Percent change from same month previous year</i>	5.23	-0.97
Transportation equipment	113.7	115.0
<i>Percent change from same month previous year</i>	2.00	1.19

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from June 2001 to September 2001 are preliminary. A more complete description of producer prices is given in Chapter 14 of the *BLS Handbook of Methods*, available at: [http://www.bls.gov/opub/hom/homch14\\_e.htm](http://www.bls.gov/opub/hom/homch14_e.htm).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppihome.htm>.

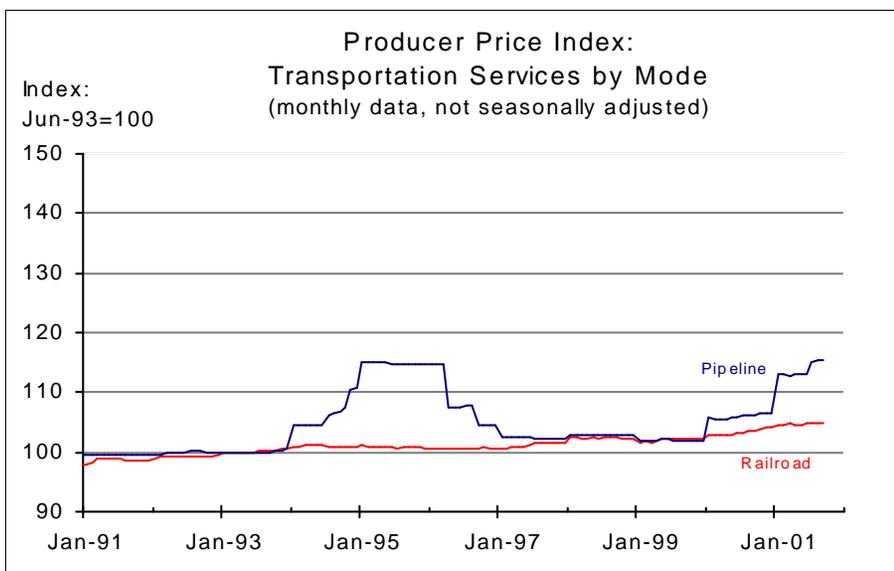
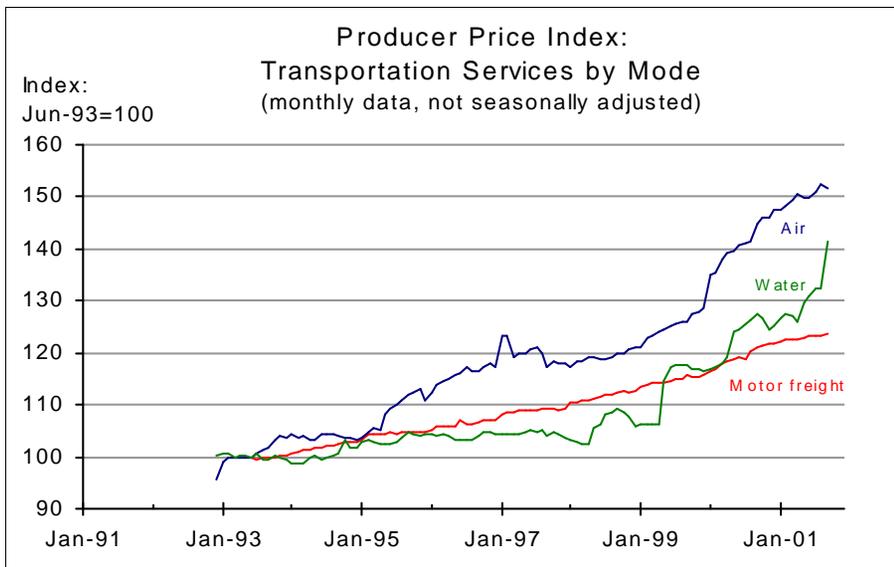


Producer prices are those charged for the output of firms in a particular industry, or by all firms, regardless of industrial classification, for a particular commodity. These prices exclude markups at later stages of processing and the retail level. Producer prices reflect prices charged to anyone purchasing directly from the firm, including consumers, when the firm also serves as a retailer.

Changes in producer prices for transportation inputs suggest the direction of future costs for providing transportation services. Motor vehicle prices are strongly seasonal, declining as the model year culminates each September.



PRODUCER PRICES OF FOR-HIRE TRANSPORTATION SERVICES



Price Index (Jun-93=100)	Sep-00	Sep-01
Air transportation	145.0	151.8
<i>Percent change from same month previous year</i>	14.95	4.69
Water transportation	127.4	141.3
<i>Percent change from same month previous year</i>	8.27	10.94
Motor freight transportation and warehousing	121.2	123.6
<i>Percent change from same month previous year</i>	4.66	1.98
Pipelines, excluding natural gas	106.1	115.3
<i>Percent change from same month previous year</i>	4.17	8.69
Railroad transportation	103.5	105.0
<i>Percent change from same month previous year</i>	1.24	1.39

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

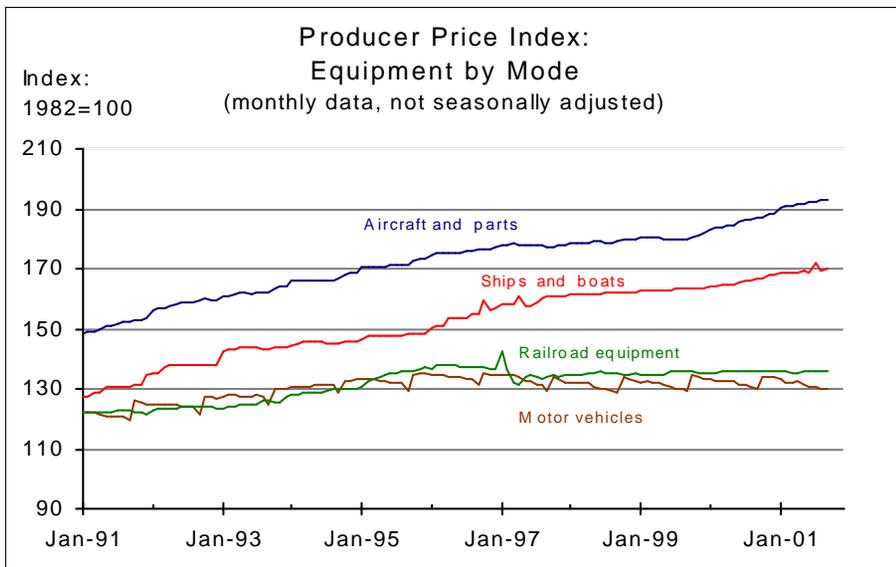
Data from June 2001 to September 2001 are preliminary. The original data for the indices in this table have different base periods. For comparability, the indices have been adjusted to have a common base period (1993).

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>

Producer prices reflect prices charged to anyone, including consumers when the firm also serves as a retailer. Actual prices to users of transportation services will differ due to substitution between domestic and foreign markets, and substitution between user-and market-provided services.



PRODUCER PRICES FOR TRANSPORTATION EQUIPMENT



Price Index (1982=100)	Sep-00	Sep-01
Aircraft and parts	187.2	192.9
<i>Percent change from same month previous year</i>	3.94	3.03
Ships and boats	166.4	169.8
<i>Percent change from same month previous year</i>	1.90	2.04
Railroad equipment	135.9	135.6
<i>Percent change from same month previous year</i>	0.07	-0.22
Motor vehicles and motor vehicle equipment	130.2	130.3
<i>Percent change from same month previous year</i>	0.85	0.08

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

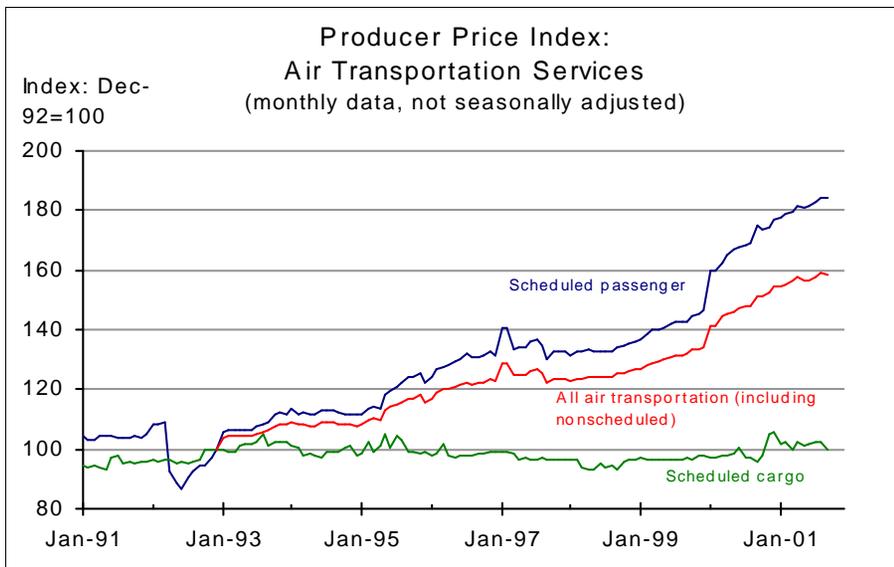
Data from June 2001 to September 2001 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>

Transportation equipment prices have accounted for about 47 percent of the total price of user-operated transportation in recent years (Table 2-13, *National Transportation Statistics 1999*, Bureau of Transportation Statistics, U.S. Department of Transportation).



**PRODUCER PRICES OF AIR TRANSPORTATION SERVICES**



Price Index (Dec-92=100)	Sep-00	Sep-01
Scheduled air transportation - passenger	174.8	184.5
<i>Percent change from same month previous year</i>	<i>22.34</i>	<i>5.55</i>
All air transportation (including nonscheduled)	151.3	158.6
<i>Percent change from same month previous year</i>	<i>14.80</i>	<i>4.82</i>
Scheduled air transportation - cargo	96.1	99.9
<i>Percent change from same month previous year</i>	<i>-0.94</i>	<i>3.96</i>

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

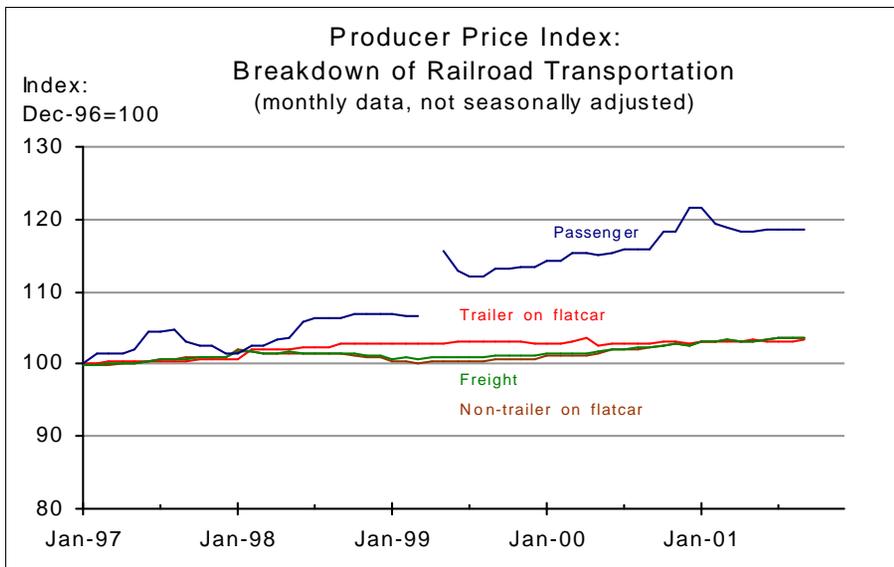
Data from June 2001 to September 2001 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>

Producer prices for scheduled air transportation services represent prices for business and personal travel, as well as shipment of high-value freight. Because producers also act as retailers, a change in prices charged by airlines is immediately passed on to consumers.



**PRODUCER PRICES OF RAILROAD TRANSPORTATION SERVICES**



NOTE: U.S Department of Labor, Bureau of Labor Statistics reports missing data for April 1999 for passenger transportation.

Producer prices for rail transportation indicate prices to producers for freight and to passengers for intercity travel. Rail transportation of trailers is an important component of intermodal freight transportation. See indicator for prices of transportation services for the aggregated producer price index for rail transportation services.

Price Index (Dec-96=100)	Sep-00	Sep-01
Passenger	115.8	118.7
<i>Percent change from the same month previous year</i>	2.39	2.50
Trailer on flatcar	102.7	103.3
<i>Percent change from the same month previous year</i>	-0.29	0.58
Freight	102.3	103.7
<i>Percent change from the same month previous year</i>	1.19	1.37
Non-trailer on flatcar	102.2	103.7
<i>Percent change from the same month previous year</i>	1.49	1.47

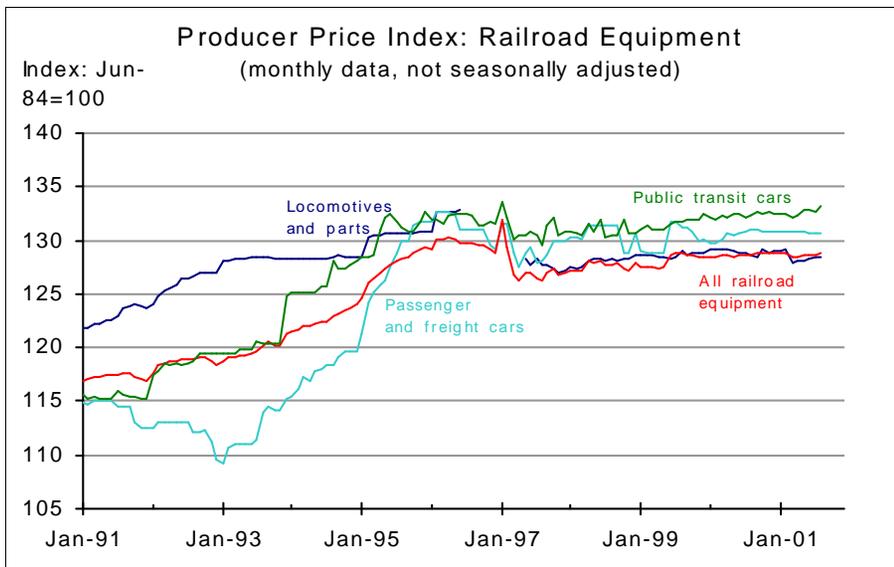
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from June 2001 to September 2001 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>



PRODUCER PRICES OF RAILROAD EQUIPMENT



Rail equipment represents a major cost to rail service providers.

Price Index (Jun-84=100)	Sep-00	Sep-01
Public transit cars, all rebuilt cars, and all car parts <i>Percent change from same month previous year</i>	132.6 0.53	133.4 0.60
Passenger and freight cars, new (excluding parts) <i>Percent change from same month previous year</i>	131.0 -0.15	130.4 -0.46
Locomotives and parts <i>Percent change from same month previous year</i>	128.5 -0.16	128.2 -0.23
All railroad equipment <i>Percent change from same month previous year</i>	128.8 0.08	128.7 -0.08

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

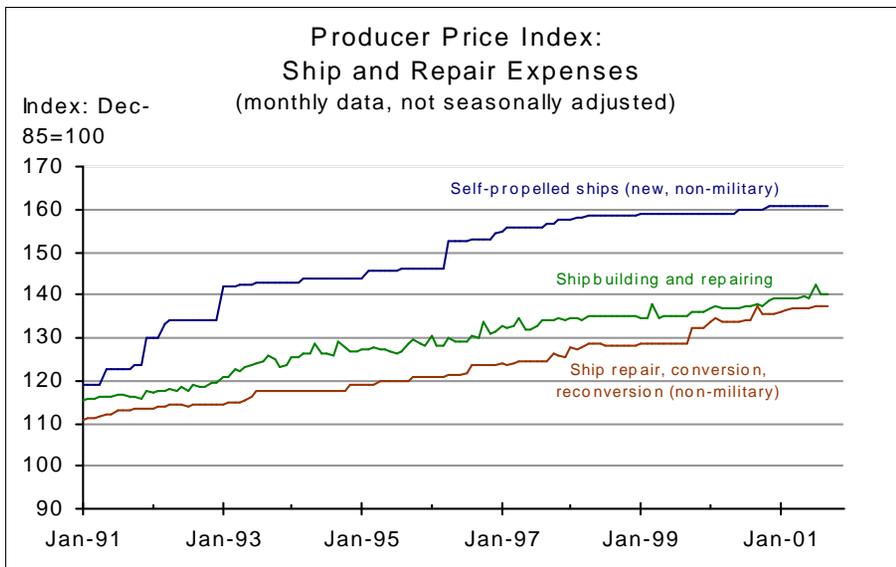
Data from June 2001 to September 2001 are preliminary. The series presented on this page use an industry-based PPI, rather than the commodity-based PPI used on page 36, because the industry-based PPI was less affected by these events.

Data for July, 1996 to April, 1997 for locomotives were affected by a strike at GM, and a revision of the BLS weighting scheme. Data for this period are anomalous, and are not depicted in the graph.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>



**PRODUCER PRICES OF EQUIPMENT AND REPAIR SERVICES FOR WATER TRANSPORTATION**



Shipbuilding and repair expenses are major costs in providing water transportation services.

Price Index (Dec-85=100)	Sep-00	Sep-01
Self-propelled ships (new, non-military)	160.1	160.9
<i>Percent change from same month previous year</i>	<i>0.76</i>	<i>0.50</i>
Ship building and repairing	137.6	140.2
<i>Percent change from same month previous year</i>	<i>1.85</i>	<i>1.89</i>
Ship repair, conversion, reconversion (non-military)	137.2	137.5
<i>Percent change from same month previous year</i>	<i>6.52</i>	<i>0.22</i>

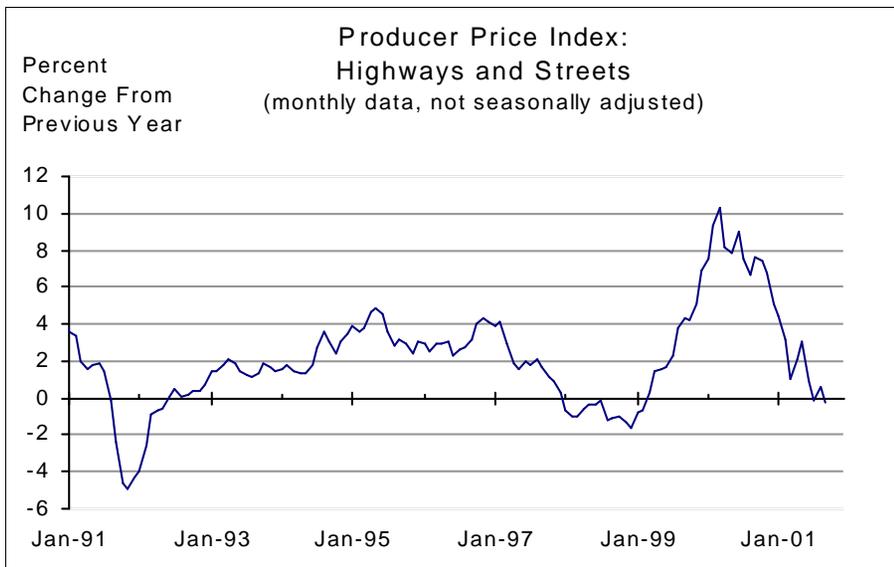
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from June 2001 to September 2001 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>



**PRODUCER PRICES OF HIGHWAY AND STREET CONSTRUCTION**

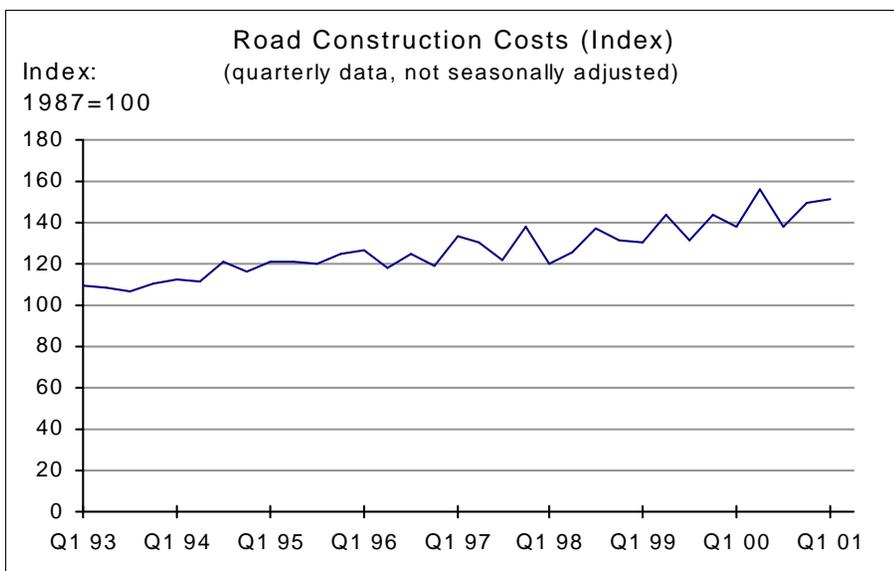


Price Index (Jun-86=100)	Sep-00	Sep-01
Highways and Streets	138.8	138.6
<i>Percent change from same month previous year</i>	7.60	-0.14

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data from June 2001 to September 2001 are preliminary.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/ppi/home.htm?H3>



Index: (1987 = 100)	Q1 00	Q1 01
Road construction costs	138.1	151.2
<i>Percent change from same quarter previous year</i>	5.66	9.49

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

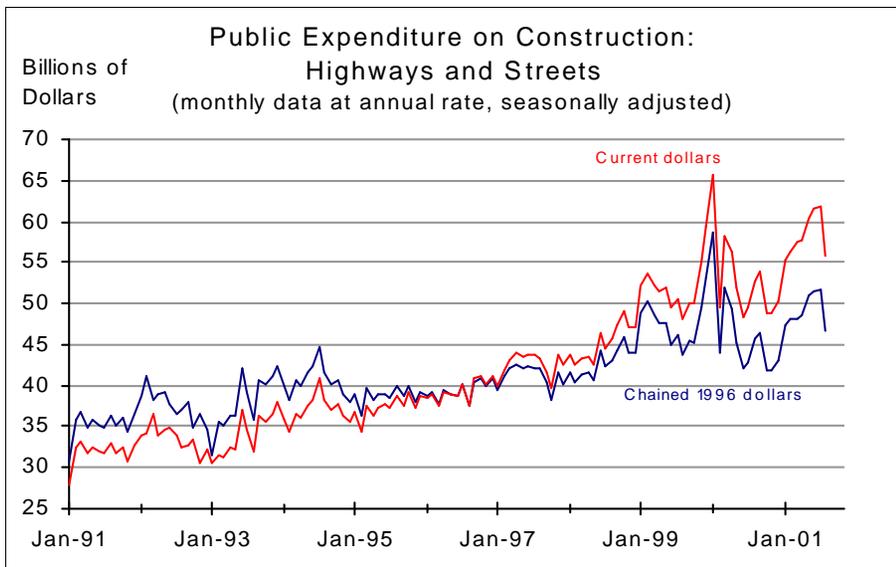
Trends in highway construction costs are measured by an index of average contract prices compiled from reports of state highway contract awards for federal-aid contracts greater than \$500,000. Since the enactment of the Intermodal Surface Transportation Efficiency Act of 1991, the index reflects federal-aid contracts on the National Highway System.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, press release FHWA 19-01, May 9, 2001, and previous releases.

Construction prices for highways and streets represent the price to government in providing a key component of transportation infrastructure.



**PUBLIC EXPENDITURES ON CONSTRUCTION OF HIGHWAYS AND STREETS**



Highways and streets are the largest component of public transportation infrastructure spending.

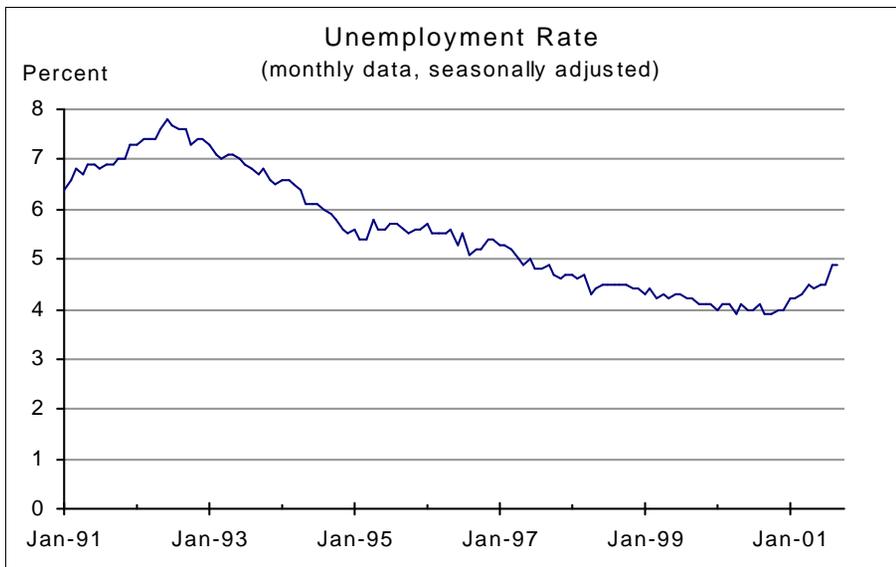
Public Expenditure on Construction	Jul-01	Aug-01
Highways and streets (billions of current dollars)	61.76	55.79
<i>Percent change from previous month</i>	0.36	-9.66
Highways and streets (billions of chained 1996 dollars)	51.77	46.77
<i>Percent change from previous month</i>	0.62	-9.66

NOTE: The data has changed due to new Census Bureau estimating methodologies. Questions can be directed to Mike Davis, 301-457-1605.

SOURCE: U.S. Department of Commerce, Bureau of the Census, available at: <http://www.census.gov/pub/const/C30/c30curtb.html>.



UNEMPLOYMENT RATE



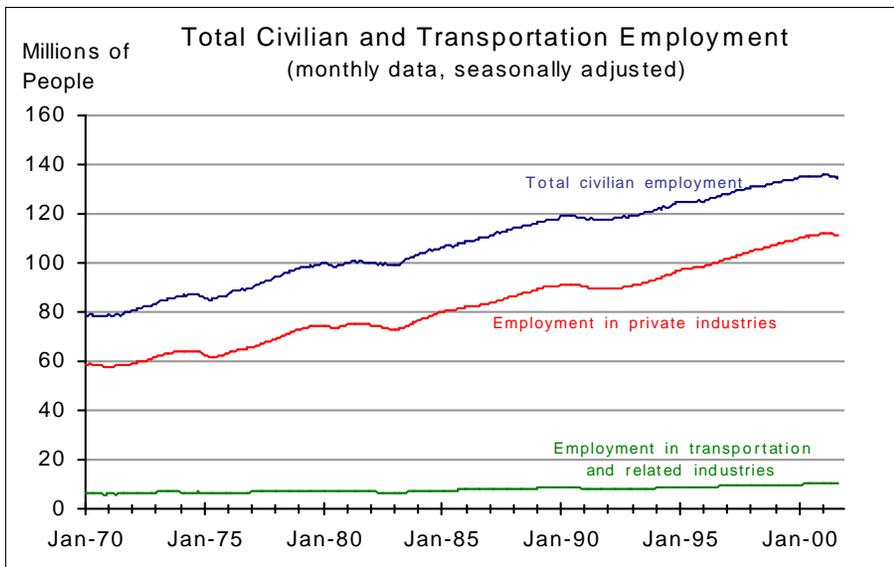
Civilian Labor Force	Aug-01	Sep-01
Unemployment rate (percent)	4.9	4.9
Number of unemployed (thousands)	6,957	7,009

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Overall BLS Most Requested Series, available at: <http://stats.bls.gov/top20.html>.

The generally low unemployment rate in recent years suggests a tight labor market for industry in general, as well as for transportation firms. It also suggests increased demand for transportation to and from work, as well as for leisure travel.

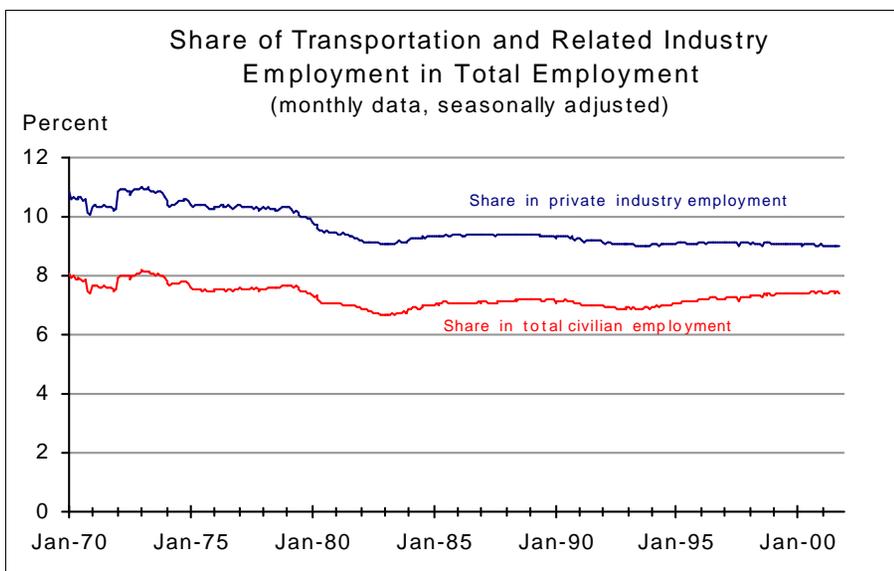


TRANSPORTATION EMPLOYMENT



Employment (thousands)	Aug-01	Sep-01
Total civilian employment	134,393	135,181
<i>Percent change from previous month</i>	-0.73	0.59
Employment in private industries	111,373	111,177
<i>Percent change from previous month</i>	-0.13	-0.18
Employment in transport and related industries	10,031	10,018
<i>Percent change from previous month</i>	-0.29	-0.13

Share of Transportation and Related Industry Employment (percent)	Aug-01	Sep-01
As share of private industry employment	9.01	9.01
<i>Change from previous month</i>	-0.16	0.05
As share of total civilian employment	7.46	7.41
<i>Change from previous month</i>	0.44	-0.71



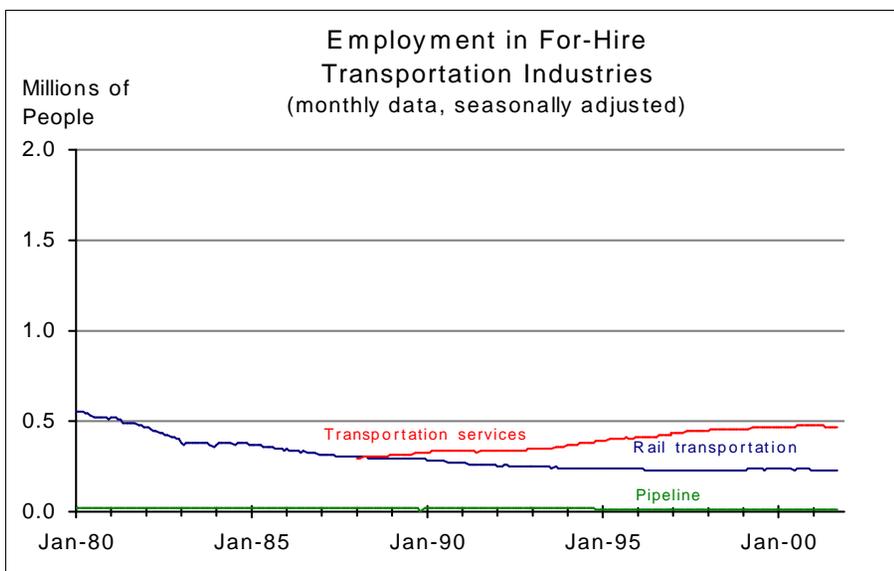
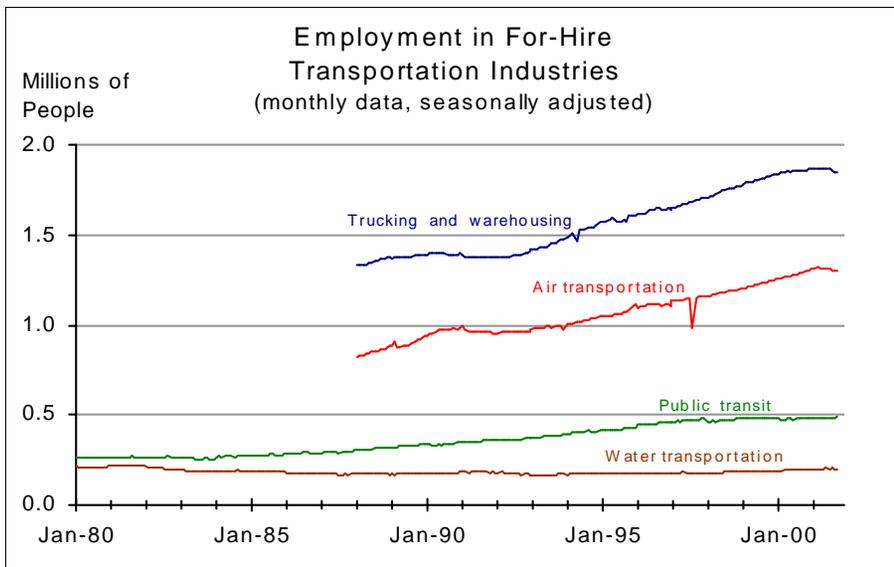
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by sex and age ("A" Tables) and Employees on nonfarm payrolls by industry ("B" Tables), available at: <http://www.bls.gov/cpsatabs.htm>.

One broad measure of transportation employment is employment in transportation-related industries, including for-hire transportation (railroad, trucking, air, water, pipeline, transit, and transportation services) and industries that support transportation directly (e.g., motor vehicle and equipment manufacturing, aircraft manufacturing, auto dealers and service stations, and auto repair and parking services).

Transportation-related industry employment does not include transportation occupations in non-transportation industries, such as truck drivers working for wholesale and retail stores. When employment in transportation occupations in non-transportation industries is included, total transportation-related employment would account for about 12 percent of U.S. civilian jobs.



FOR-HIRE TRANSPORTATION EMPLOYMENT



Employment in For-Hire Transportation Industries (thousands)	Aug-01	Sep-01
Trucking and warehousing	1,844	1,843
<i>Percent change from previous month</i>	-1.02	-0.05
Air transportation	1,303	1,297
<i>Percent change from previous month</i>	-0.08	-0.46
Public transit	486	491
<i>Percent change from previous month</i>	0.21	1.03
Transportation services	463	463
<i>Percent change from previous month</i>	-0.64	0.00
Rail transportation	226	227
<i>Percent change from previous month</i>	0.00	0.44
Water transportation	199	201
<i>Percent change from previous month</i>	-1.97	1.01
Pipeline	14	14
<i>Percent change from previous month</i>	0.00	0.00

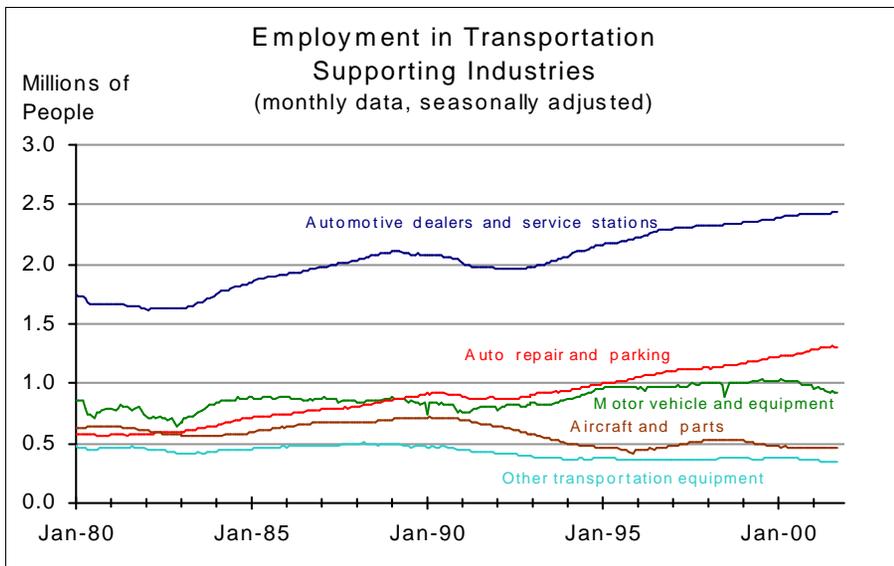
NOTE: For-hire transportation includes establishments providing passenger and freight transportation and related services on a fee basis to the general public or other business enterprises. For-hire does not include in-house transportation establishments within nontransportation enterprises, which provide transportation services for the enterprises' own use.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by sex and age ("A" Tables) and Employees on nonfarm payrolls by industry ("B" Tables), available at: <http://www.bls.gov/cpsatabs.htm>.

Employment in for-hire transportation industries accounted for about 45 percent of total transportation-related industry employment in recent years. The trucking and warehousing industry and air transportation together accounted for about 70 percent of the employment in for-hire transportation in the last few years.



TRANSPORTATION SUPPORTING INDUSTRY EMPLOYMENT



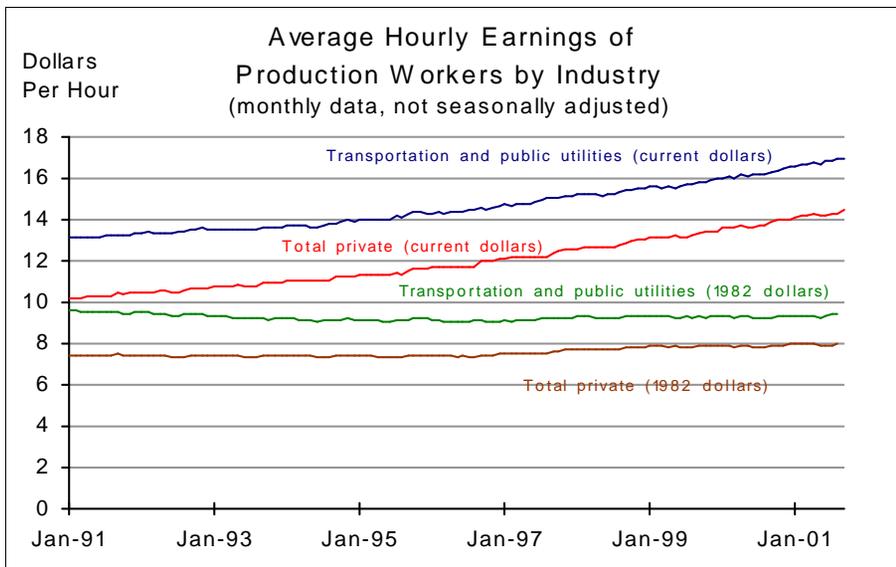
Employment in Transportation Supporting Industries (thousands)	Aug-01	Sep-01
Auto dealers and service stations	2,441	2,439
<i>Percent change from previous month</i>	<i>0.25</i>	<i>-0.08</i>
Auto repair and parking	1,308	1,307
<i>Percent change from previous month</i>	<i>-0.30</i>	<i>-0.08</i>
Motor vehicle and equipment manufacturing	928	918
<i>Percent change from previous month</i>	<i>-0.85</i>	<i>-1.08</i>
Aircraft and parts manufacturing	465	466
<i>Percent change from previous month</i>	<i>-0.21</i>	<i>0.22</i>
Other transportation equipment manufacturing	354	352
<i>Percent change from previous month</i>	<i>1.14</i>	<i>-0.56</i>

Employment in transportation supporting industries accounts for over half of total transportation-related industry employment. Automotive dealers and service stations employ the most people among transportation supporting industries. Employment of automotive dealers and service stations decreased 0.08 percent in September 2001. At the same time, employment of motor vehicle and equipment manufacturing experienced a decrease of 1.08 percent.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Status of Civilian Population by sex and age ("A" Tables) and Employees on nonfarm payrolls by industry ("B" Tables), available at: <http://www.bls.gov/cpsatabs.htm>.



**HOURLY EARNINGS OF PRODUCTION WORKERS IN TRANSPORTATION INDUSTRIES**



Hourly earnings are the actual return to the worker for an hour worked. They are on a "gross" basis because they include not only basic hourly and incentive wage rates, but also such variable factors as premium pay for overtime and late-shift work. However, average hourly earnings are not average hourly labor costs to employers because they do not include irregular bonuses, retroactive items, payments of various welfare benefits, payroll taxes paid by employers, and earnings for those employees not covered under production worker, construction worker, or non-supervisory employee definitions.

Changes in average hourly earnings indicate the changes in the actual return to production workers. They also reflect shifts in the number of employees between relatively high-paid and low-paid work.

Historically, average hourly earnings of production workers in transportation industries have been higher than the all-industry average. However, the gap between the two has been shrinking. This is particularly true when measured in constant dollars. In 1982 dollars, the all-industry average hourly earnings increased 4.46 percent between August 2000 and August 2001.

Average Hourly Earnings	Aug-00	Aug-01
Transportation and public utilities (current dollars)	16.22	16.95
<i>Percent change from same month previous year</i>	3.38	4.50
Total private (current dollars)	13.67	14.28
<i>Percent change from same month previous year</i>	3.56	4.46
Transportation and public utilities (1982 dollars)	9.28	9.45
<i>Percent change from same month previous year</i>	0.00	1.83
Total private (1982 dollars)	7.83	7.96
<i>Percent change from same month previous year</i>	0.26	1.66

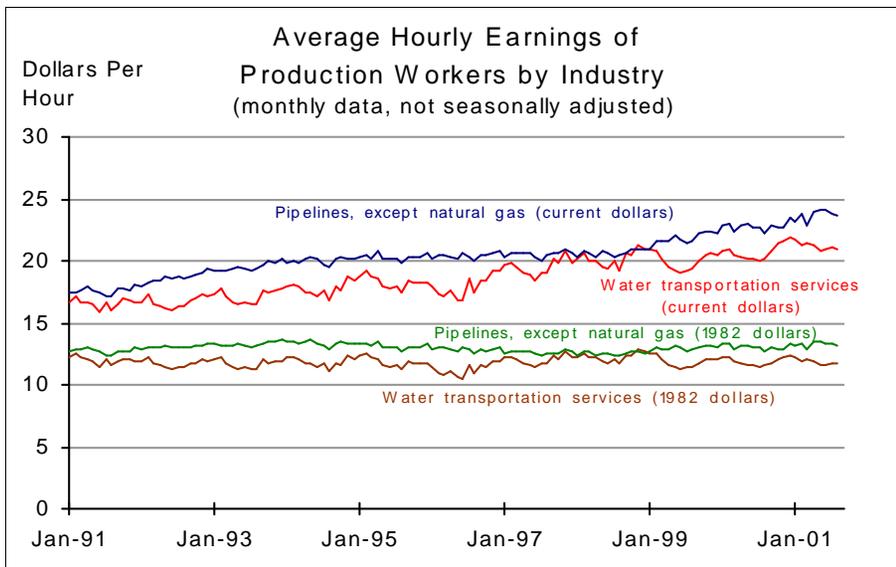
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

In the transportation industry, production workers include vehicle operators, vehicle maintenance and repair workers, transportation facility operators, and workers directly engaged in providing passenger and freight transportation services.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at <http://www.bls.gov/ecthome.htm>.



**HOURLY EARNINGS OF PIPELINE AND WATER TRANSPORTATION WORKERS**



Transportation industry hourly earnings are the actual return to production workers in transportation industries for an hour worked. Changes in average transportation industry hourly earnings may be caused by either changes in production workers' hourly wage rates or shifts in the number of workers between relatively high-paid occupations and low-paid occupations.

Average Hourly Earnings	Aug-00	Aug-01
Pipelines, except natural gas (current dollars)	22.22	23.65
<i>Percent change from same month previous year</i>	<i>2.82</i>	<i>6.44</i>
Water transportation services (current dollars)	20.22	20.99
<i>Percent change from same month previous year</i>	<i>4.77</i>	<i>3.81</i>
Pipelines, except natural gas (1982 dollars)	12.71	13.19
<i>Percent change from same month previous year</i>	<i>-0.54</i>	<i>3.72</i>
Water transportation services (1982 dollars)	11.57	11.70
<i>Percent change from same month previous year</i>	<i>1.34</i>	<i>1.16</i>

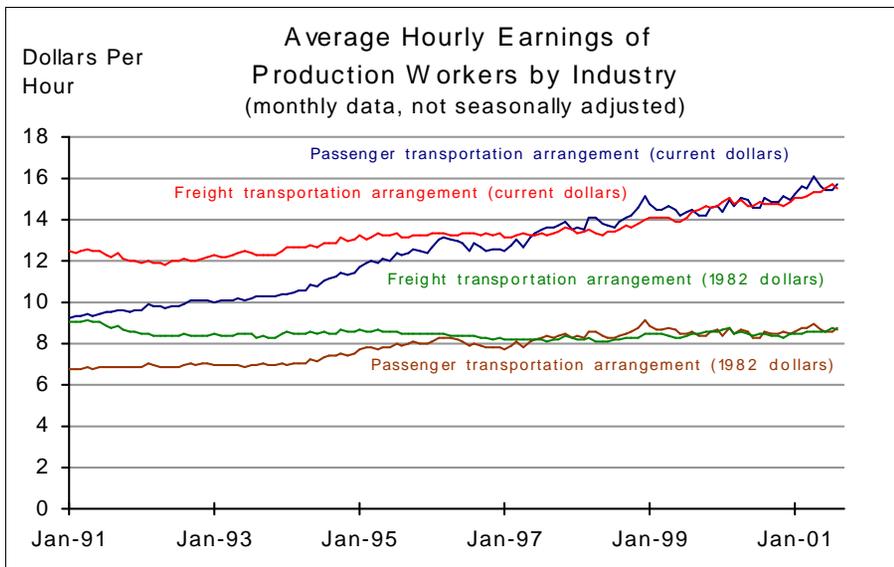
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

In the transportation industry, production workers include vehicle operators, vehicle maintenance and repair workers, transportation facility operators, and workers directly engaged in providing passenger and freight transportation services.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at <http://www.bls.gov/ecthome.htm>.



**HOURLY EARNINGS OF WORKERS IN TRANSPORTATION ARRANGEMENT SERVICES**



Between August 2000 and August 2001, the average hourly earnings, measured in current dollars, increased in both passenger transportation arrangement and freight transportation arrangement.

Average Hourly Earnings	Aug-00	Aug-01
Passenger transportation arrangement (current dollars)	15.04	15.75
<i>Percent change from same month previous year</i>	4.23	4.72
Freight transportation arrangement (current dollars)	14.74	15.53
<i>Percent change from same month previous year</i>	2.57	5.36
Passenger transportation arrangement (1982 dollars)	8.60	8.78
<i>Percent change from same month previous year</i>	0.82	2.05
Freight transportation arrangement (1982 dollars)	8.43	8.66
<i>Percent change from same month previous year</i>	-0.78	2.67

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

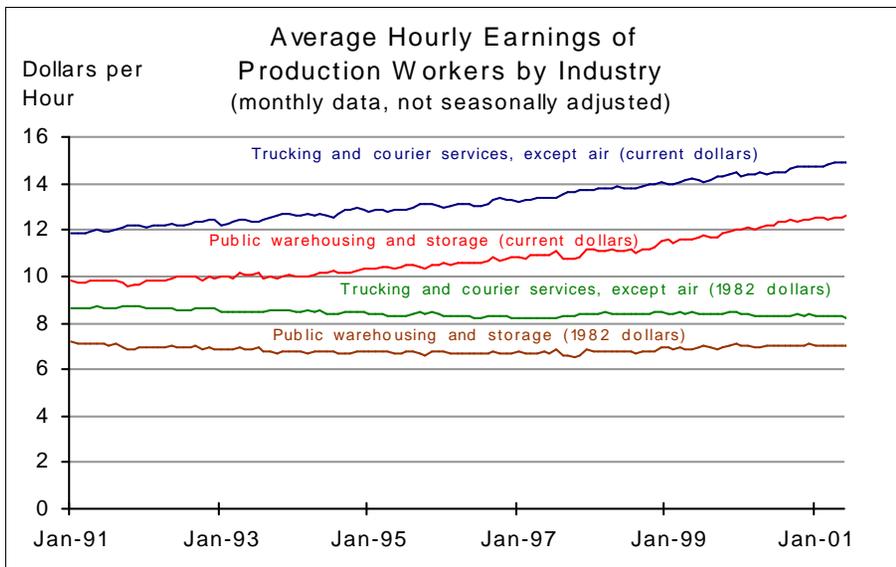
Passenger transportation arrangement includes travel agencies, tour operators, and other establishments primarily engaged in arranging passenger transportation, such as ticket offices, not operated by transportation companies, for railroads, buses, ships, and airlines.

Freight transportation arrangement includes establishments primarily engaged in furnishing information and acting as agents in arranging transportation for freight and cargo, such as shipping agents, freight consolidators, shipping document preparation and tariff consultants.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at <http://www.bls.gov/ecthome.htm>.



**HOURLY EARNINGS OF WORKERS IN TRUCKING AND PUBLIC WAREHOUSING SERVICES**



Average Hourly Earnings	Aug-00	Aug-01
Trucking and courier services, except air (current dollars)	14.51	14.84
<i>Percent change from same month previous year</i>	2.76	2.27
Public warehousing and storage (current dollars)	12.32	12.80
<i>Percent change from same month previous year</i>	5.12	3.90
Trucking and courier services, except air (1982 dollars)	8.30	8.27
<i>Percent change from same month previous year</i>	-0.60	-0.34
Public warehousing and storage (1982 dollars)	7.05	7.14
<i>Percent change from same month previous year</i>	1.68	1.24

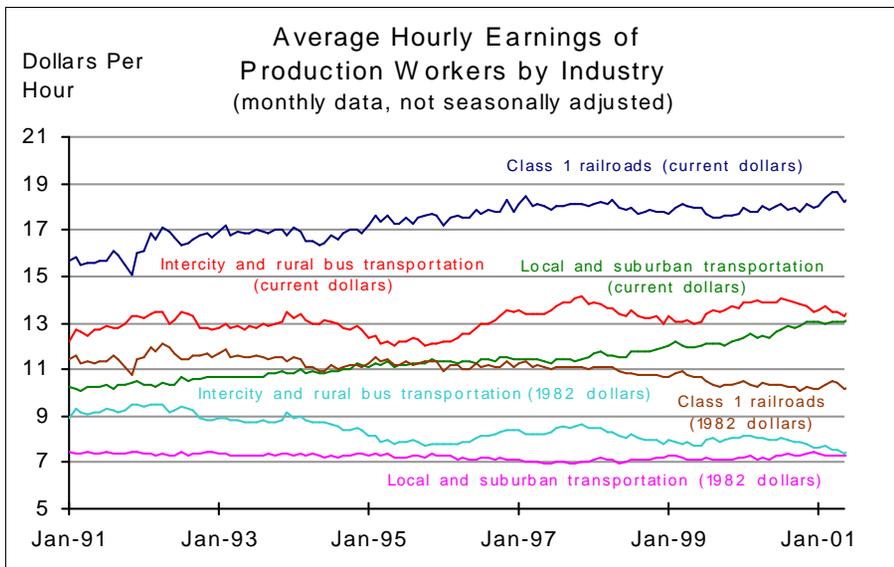
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at <http://www.bls.gov/ecthome.htm>.

Measured in current dollars, the average hourly earnings of workers in trucking and courier services decreased 0.34 percent, while average hourly earnings in warehousing continued to increase in August 2001. This increase, however, was roughly equivalent to the increase in the cost of living in the same period.



HOURLY EARNINGS OF RAIL, BUS, AND TRANSIT WORKERS



Transportation industry hourly earnings are the actual return to production workers in transportation industries for an hour worked. Changes in average transportation industry hourly earnings may be caused by either changes in production workers' hourly wage rates or shifts in the number of workers between relatively high-paid occupations and low-paid occupations.

Between August 2000 and August 2001, the average hourly earnings in Class I Railroads increased 2.90 percent, while average hourly earnings in local and suburban transportation services increased 2.80 percent. In contrast, the average hourly earnings in intercity and rural bus transportation services decreased 5.34 percent.

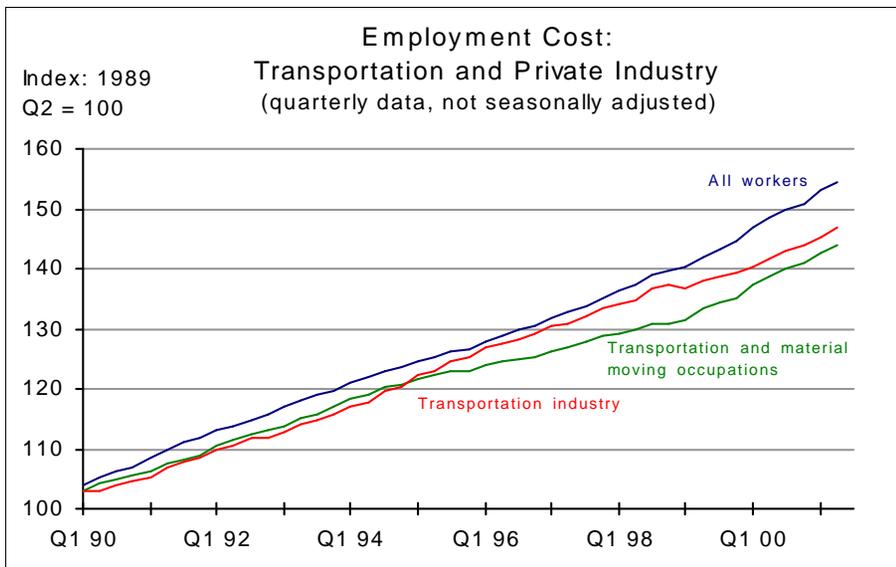
Average Hourly Earnings	Aug-00	Aug-01
Class I Railroads (current dollars)	17.91	18.43
<i>Percent change from same month previous year</i>	2.11	2.90
Intercity and rural bus transportation (current dollars)	13.98	13.58
<i>Percent change from same month previous year</i>	3.10	-2.86
Local and suburban transportation (current dollars)	12.86	13.22
<i>Percent change from same month previous year</i>	6.46	2.80
Class I Railroads (1982 dollars)	10.25	10.28
<i>Percent change from same month previous year</i>	-1.23	0.28
Intercity and rural bus transportation (1982 dollars)	8.00	7.57
<i>Percent change from same month previous year</i>	-0.27	-5.34
Local and suburban transportation (1982 dollars)	7.36	7.37
<i>Percent change from same month previous year</i>	2.98	0.17

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, National Employment, Hours, and Earnings, available at <http://www.bls.gov/ecthome.htm>.



TRANSPORTATION AND PRIVATE INDUSTRY EMPLOYMENT COSTS



The Employment Cost Index (ECI) measures changes in the cost of labor to employers. Since the ECI is a fixed-employment-weighted index, it is free from the influence of employment shifts among occupations and industries.

Over the last decade, the rise of employment cost in the transportation industry was slower than in private industry as a whole and the rise of employment cost of transportation occupations was slower than the average of all workers. Between the second quarter of 2000 and second quarter of 2001, employment cost of transportation occupations increased 3.82 percent, a rate lower than that of all workers (4.04 percent), while employment cost of transportation industry rose at an even slower pace of 3.60 percent.

Employment Cost: Total Compensation (Index)	Q2 00	Q2 01
All workers (private industry)	148.50	154.50
<i>Percent change from same quarter previous year</i>	<i>4.58</i>	<i>4.04</i>
Transportation industry (private)	141.80	146.90
<i>Percent change from same quarter previous year</i>	<i>2.68</i>	<i>3.60</i>
Transportation occupations (private)	138.60	143.90
<i>Percent change from same quarter previous year</i>	<i>3.74</i>	<i>3.82</i>

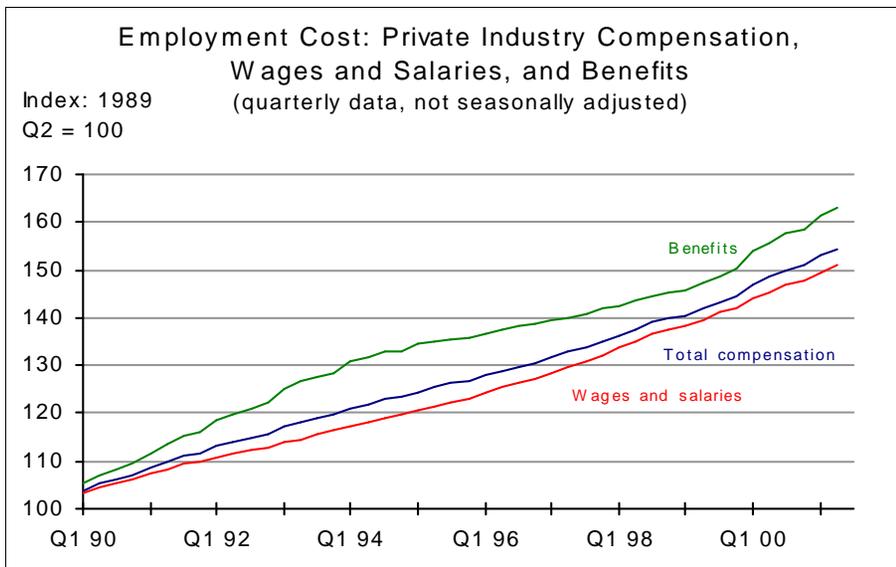
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment cost to employers is the total compensation cost incurred by employers in obtaining labor inputs. Compensation costs include wages, salaries, and employer costs for employee benefits. Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including non-transportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, Public Query Data, available at <http://www.bls.gov/ecthome.htm>.



**BREAKDOWN OF PRIVATE INDUSTRY EMPLOYMENT COSTS**



Employment cost can be broken down into two major components, wages and salaries, and benefits. Benefit costs increased faster than wages and salaries for most industries over the last decade. Between the second quarter of 2000 and the second quarter of 2001, the average benefit costs of all workers in private industry rose 4.82 percent, while their average wage and salary rose 3.78 percent.

All Workers (Index)	Q2 00	Q2 01
Benefits (private industries)	155.70	163.20
<i>Percent change from same quarter previous year</i>	<i>5.70</i>	<i>4.82</i>
Total compensation (private industries)	148.50	154.50
<i>Percent change from same quarter previous year</i>	<i>4.58</i>	<i>4.04</i>
Wages and salaries (private industries)	145.40	150.90
<i>Percent change from same quarter previous year</i>	<i>4.08</i>	<i>3.78</i>

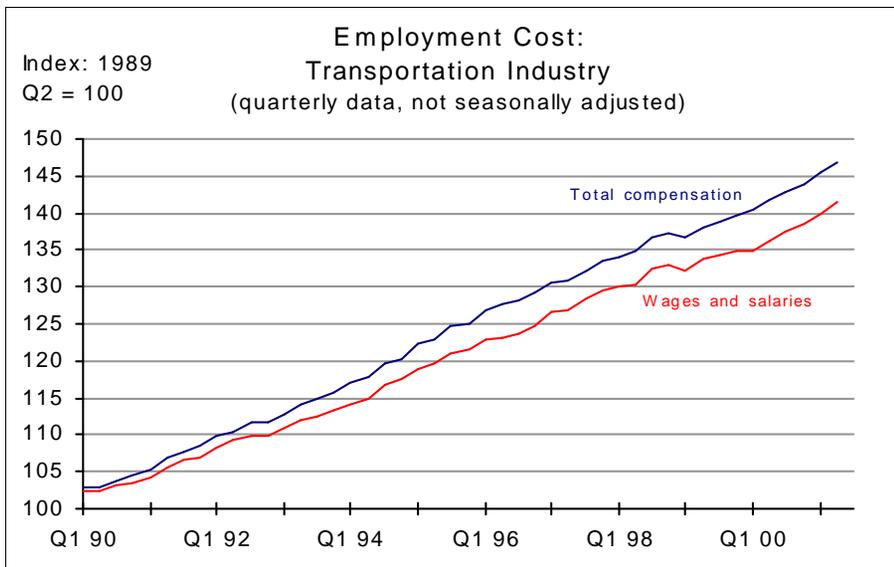
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment cost to employers is the total compensation cost incurred by employers in obtaining labor inputs. Compensation costs include wages, salaries, and employer costs for employee benefits. Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including non-transportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, Public Query Data, available at <http://www.bls.gov/ecthome.htm>



EMPLOYMENT COSTS FOR TRANSPORTATION INDUSTRIES



Transportation Industry (Index)	Q2 00	Q2 01
Total compensation (private)	141.80	146.90
<i>Percent change from same quarter previous year</i>	2.68	3.60
Wages and salaries (private)	136.20	141.60
<i>Percent change from same quarter previous year</i>	1.87	3.96

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

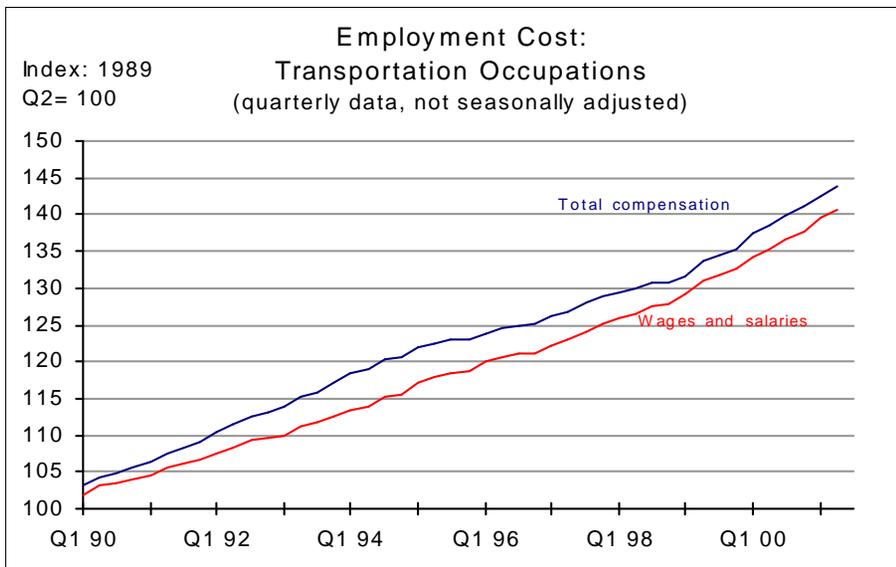
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, available at <http://www.bls.gov/ecthome.htm>.

Labor cost is a significant portion of the production cost of every industry. This is particularly true for the transportation industries, which are much more labor intensive than industry as a whole. Changes in labor cost directly affect the price of transportation services, the profit margin, and competitiveness of the transportation industries.

As total compensation cost increases, the balance between wages and salaries and benefits also changes over time. These changes reflect changes in economic environment and labor management practices of employers. Reflecting the general trend, the share of benefit costs in total compensation cost increased in transportation industries over last decade. Though data on benefits were not available, this trend was evidenced by the increased gap between the total compensation cost index and the wages and salaries index of both transportation industry and transportation occupations. However, between the second quarter of 2000 and the second quarter of 2001, transportation industry's wage and salary cost increased 3.96 percent, faster than its total compensation cost (3.60). This change might indicate a new trend, though it is still too early to have an answer.



EMPLOYMENT COSTS IN TRANSPORTATION OCCUPATIONS



The increased share of wage and salary in total employment cost during the last year was also observed among transportation occupations. Between the second quarter of 2000 and the second quarter of 2001, total compensation of transportation occupations increased 3.82 percent, while wages and salaries of transportation occupations increased 4.07 percent, indicating benefits increased at a slower rate during the same period.

Transportation Occupations (Index)	Q2 00	Q2 01
Total compensation (private)	138.60	143.90
<i>Percent change from same quarter previous year</i>	<i>3.74</i>	<i>3.82</i>
Wages and salaries (private)	135.20	140.70
<i>Percent change from same quarter previous year</i>	<i>3.21</i>	<i>4.07</i>

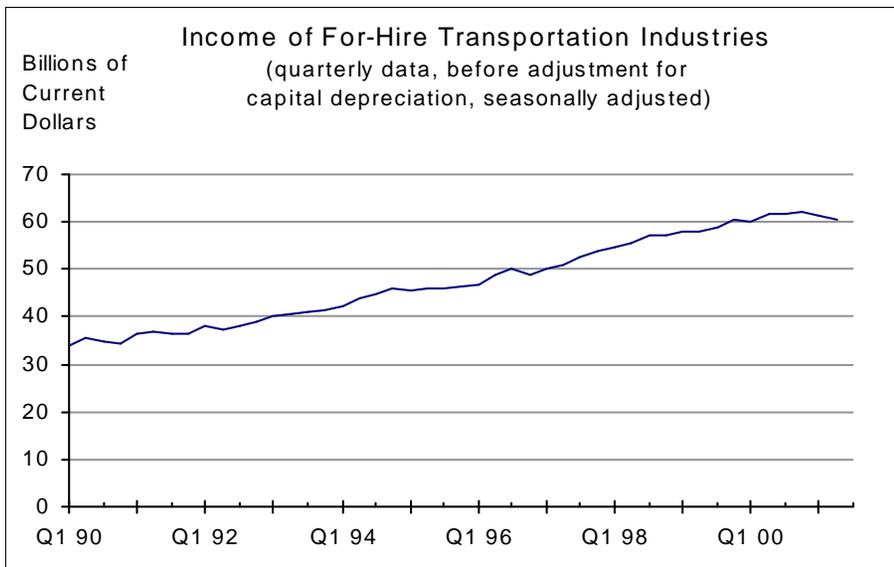
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Employment costs of transportation industry is the weighted average of the employment costs of all occupations working in transportation industries, including nontransportation industries. Employment costs of transportation occupations is the weighted average of the employment costs of all transportation occupations, including those working in non-transportation industries, such as truck drivers working for retail stores.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Employment Cost Trends, available at <http://www.bls.gov/ecthome.htm>.



TRANSPORTATION INDUSTRY PROFIT AND INCOME

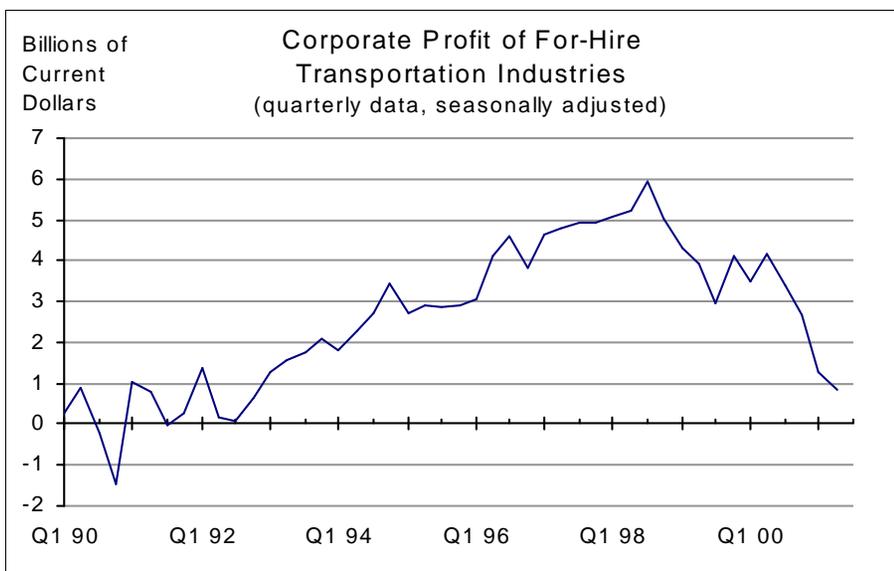


For-Hire Transportation Industries	Q1 01	Q2 01
Income (billions of dollars)	61.10	60.50
Percent change from previous quarter	-1.37	-0.98
Profit (billions of dollars)	1.28	0.83
Percent change from previous quarter	-52.34	-35.29

NOTES: For-hire transportation includes establishments providing passenger and freight transportation and related services on a fee basis to the general public or other business enterprises. For-hire does not include in-house transportation establishments within non-transportation enterprises, which provide transportation services for the enterprises' own use.

Income of a for-hire transportation industry is the difference between its revenue and the cost of its intermediate inputs (or goods and services consumed in providing transportation services). If an industry has no operations in foreign countries and its income comes entirely from its production activities (in contrast to, for example, financial activities), its income would be the same as its contribution to Gross Domestic Product.

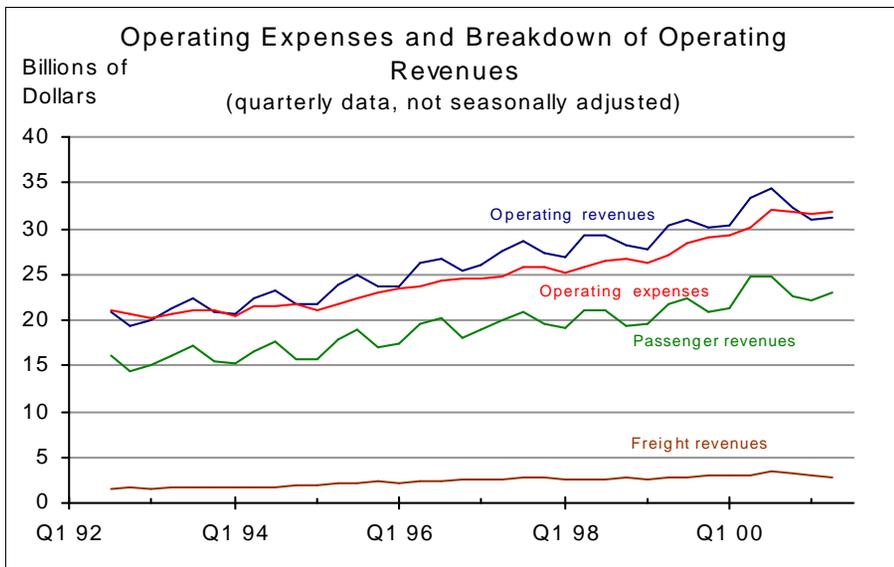
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, estimates based on *Survey of Current Business*, September 2001, NIPA Table 6.1C and Table 6.16C.



Income and profit are two measures of an industry's performance. Income growth of transportation industries has flattened out since the second quarter of last year. A one percent decrease was experienced in the second quarter of this year. Stagnant growth caused a sharp dip in transportation industries' profit. In the second quarter of this year, the profit of transportation industries reached its lowest margin since the fourth quarter of 1992.



**AIR CARRIER REAL OPERATING EXPENSES AND BREAKDOWN OF OPERATING REVENUES**



NOTE: Data for DHL, which has not reported for second quarter 2001, are excluded for all periods for comparability over time.

Air carriers' major source of revenue is passenger fares. Freight revenue has increased in importance for large air carriers in recent years, but is much smaller than passenger revenue. Air carrier asset returns are highly seasonal due to the seasonality of passenger revenues.

Billions dollars	Q2 00	Q2 01
Operating revenues	33.43	31.22
<i>Percent change from same quarter previous year</i>	<i>10.51</i>	<i>-6.60</i>
Operating expenses	30.11	31.91
<i>Percent change from same quarter previous year</i>	<i>11.06</i>	<i>6.00</i>
Passenger revenues	24.68	23.10
<i>Percent change from same quarter previous year</i>	<i>13.85</i>	<i>-6.42</i>
Freight revenues	3.06	2.70
<i>Percent change from same quarter previous year</i>	<i>8.04</i>	<i>-11.73</i>

NOTES: Data for the last year are preliminary.

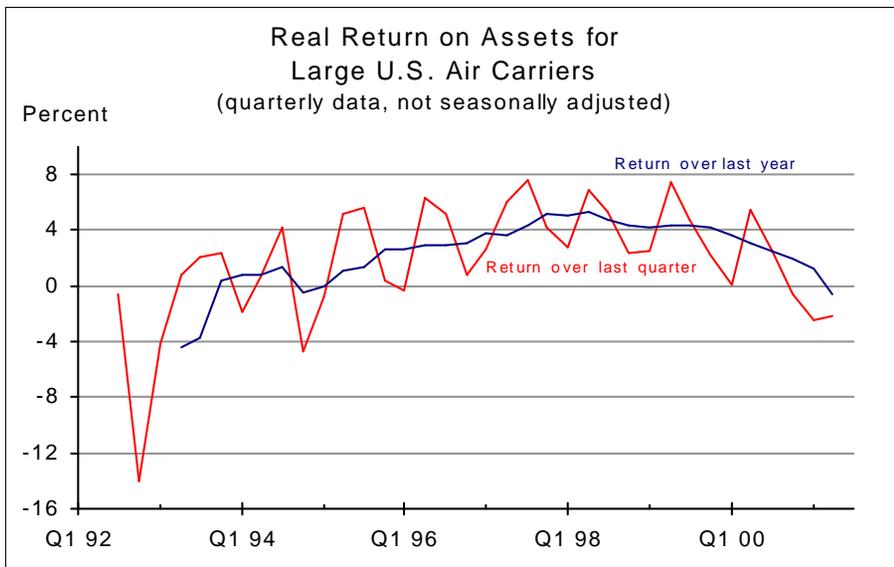
The current value is compared to the value from the same period in the previous year to account for seasonality.

The data include profits of both foreign and domestic operations for U.S. air carriers with more than 20 million dollars in annual operating revenue.

SOURCES: U.S. Department of Transportation, Bureau of Transportation Statistics, Air Carrier Financial Statistics data; and U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/cpihome.htm>.



**AIR CARRIER REAL RETURN ON ASSETS**



NOTE: Data for DHL, which has not reported for second quarter 2001, are excluded for all periods for comparability over time.

Return on assets is a measure of the profitability of investment adjusted for inflation. Improving profits depends on a combination of holding down costs while growing revenue.

Return on Assets for Large U.S. Air Carriers	Q2 00	Q2 01
Return over last quarter	5.44	-2.14
<i>Percent change from same quarter previous year</i>	-2.00	-7.58
Return over last year	3.12	-0.64
<i>Percent change from same quarter previous year</i>	-1.25	-3.76

NOTES: Data for the last year are preliminary.

The current value is compared to the value from the same period in the previous year to account for seasonality.

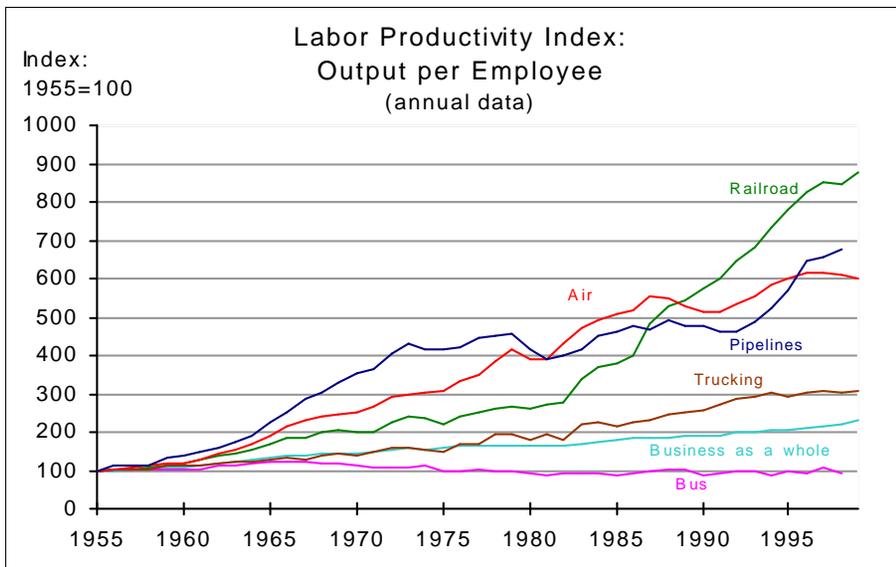
Return on assets is the ratio of net income to the average of beginning- and end-of-period assets for large air carriers. When net income and assets are deflated using the average CPI, the nominal rate of return is converted into a real rate of return.

The data include profits of both foreign and domestic operations for U.S. air carriers with more than 20 million dollars in annual operating revenue.

SOURCES: U.S. Department of Transportation, Bureau of Transportation Statistics, Air Carrier Financial Statistics data; and U.S. Department of Labor, Bureau of Labor Statistics, available at: <http://www.bls.gov/cpihome.htm>.



PRODUCTIVITY GROWTH



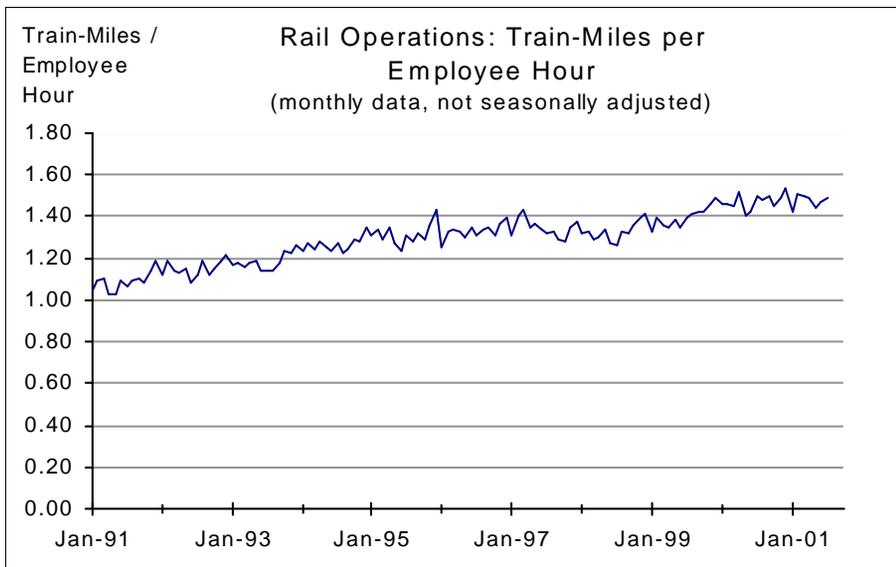
Productivity growth is the ultimate source for the increases of a nation's economic wealth and living standards. Transportation has been one of the leading sectors in productivity growth for the U.S. economy since 1955, when statistics on transportation productivity became available.

Productivity Index (1955=100)	1998	1999
Railroad	846	876
<i>Percent change from previous year</i>	-0.57	3.58
Pipelines (1997-1998)	658	677
<i>Percent change from previous year</i>	1.51	2.77
Air	612	598
<i>Percent change from previous year</i>	-0.81	-2.17
Trucking	301	305
<i>Percent change from previous year</i>	-1.89	1.31
Business as a whole	222	229
<i>Percent change from previous year</i>	2.57	2.96
Bus (1997-1998)	109	94
<i>Percent change from previous year</i>	17.23	-14.00

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, Index of Output per Employee, All Published Industries, Oct. 19, 2001.



**RAILROAD LABOR PRODUCTIVITY**



Rail Operations	Jul-00	Jul-01
Train-Miles/Employee hour	1.50	1.48
<i>Percent change from same month previous year</i>	7.26	-0.99

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

This indicator of rail productivity differs from that shown in the previous page. The data sources are different, and this measure is based on train-miles while that on the previous page is based on ton-miles.

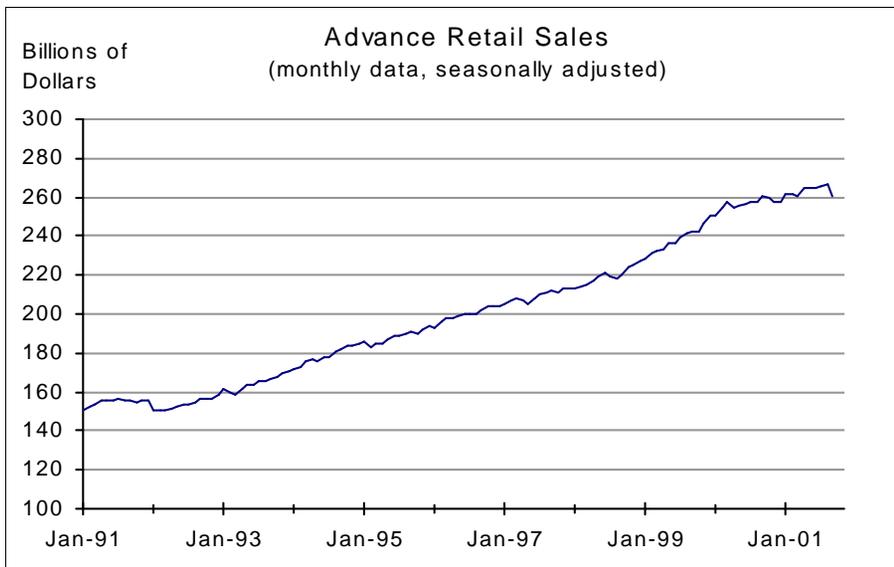
SOURCE: U.S. Department of Transportation, Federal Railroad Administration, Office of Safety Analysis, available at: <http://safetydata.fra.dot.gov/officeofsafety/>.

Train-miles per employee hour are used as a measure for labor productivity in rail-road transportation.

Total train miles include yard-switching miles.



RETAIL SALES AND TRANSPORTATION DEMAND



Advance Retail Sales	Aug-01	Sep-01
Advance retail sales (millions of dollars)	266,201	260,660
Percent change from previous month	0.34	-2.08

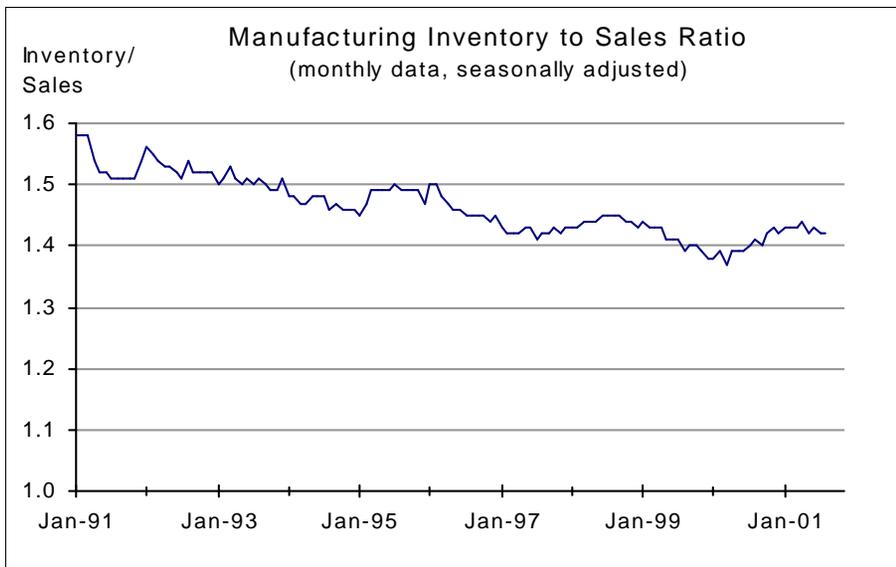
NOTE: Advance retail sales are advance estimates of monthly retail trade produced by the Bureau of the Census. The advance estimates are based on a small subsample of the Census Bureau's full retail sales sample.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Economic Briefing Room, as of Oct. 19, 2001, available at: <http://www.census.gov/svsd/www/advtable.html>.

Advance retail sales are a leading indicator of retailers' sales expectations and may suggest future demand for commercial transportation services. Retail stores may require faster and more reliable delivery of shipments as consumer demand increases and inventories are maintained at lower levels.



LEVEL OF MANUFACTURING INVENTORY



Manufacturing Inventory to Sales	Jul-01	Aug-01
Inventory/sales ratio	1.42	1.42
Percent change from previous month	-0.70	0.00

NOTE: The Census Bureau released revised historical new orders data on May 21, 2001. This report reflects those revisions.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Economic Briefing Room, as of Oct. 19, 2001, available at: <http://www.census.gov/mtis/www/mtis.html>.

Manufacturing inventory to sales ratio indicates the level of inventory that manufacturers currently maintain to meet a given sales volume. Over time, manufacturers have reduced inventory in relation to sales. Increased speed and reliability of transportation help manufacturers operate with smaller inventories.



**NEW ORDERS—ALL MANUFACTURING**



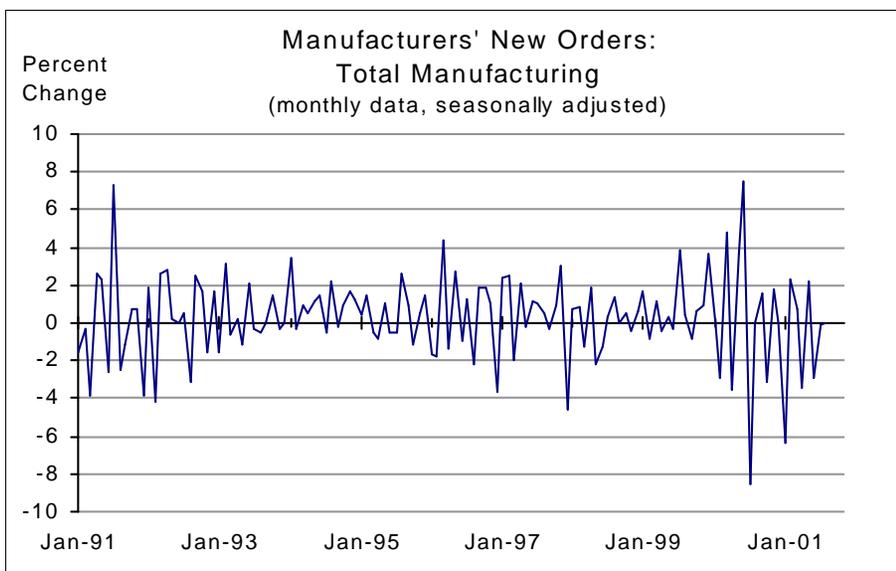
Manufacturers' New Orders	Jul-01	Aug-01
Total manufacturing (billions of dollars)	332.61	332.57
Percent change from previous month	-0.10	-0.01

NOTES: New orders, as reported in the monthly Manufacturers' Shipments, Inventories, and Orders (M3) survey conducted by the U.S. Census Bureau, are net of order cancellations and include orders received and filled during the month as well as orders received for future delivery. Orders are defined to include those supported by binding legal documents such as signed contracts, letters of award, or letters of intent, although in some industries this definition may not be strictly applicable. See more details at <http://www.census.gov/indicator/www/m3/m3desc.htm>.

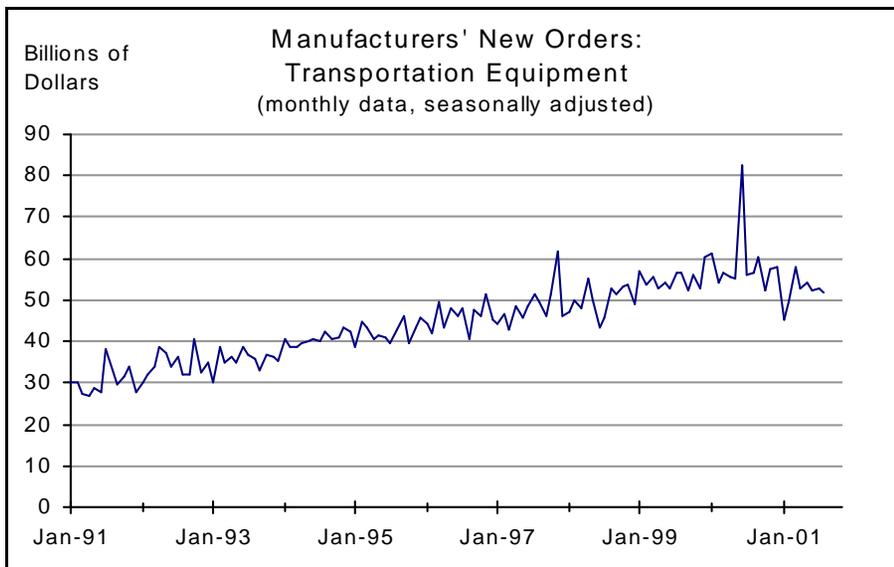
The Census Bureau released revised historical new orders data on May 21, 2001. This report reflects those revisions.

SOURCE: U.S. Department of Commerce, Bureau of the Census, available at: <http://www.census.gov/indicator/www/m3/prel/index.htm>.

Month-to-month changes in factory orders may affect demand for transportation services, including both domestic and international transportation of parts and other manufacturing inputs.



NEW ORDERS—TRANSPORTATION EQUIPMENT

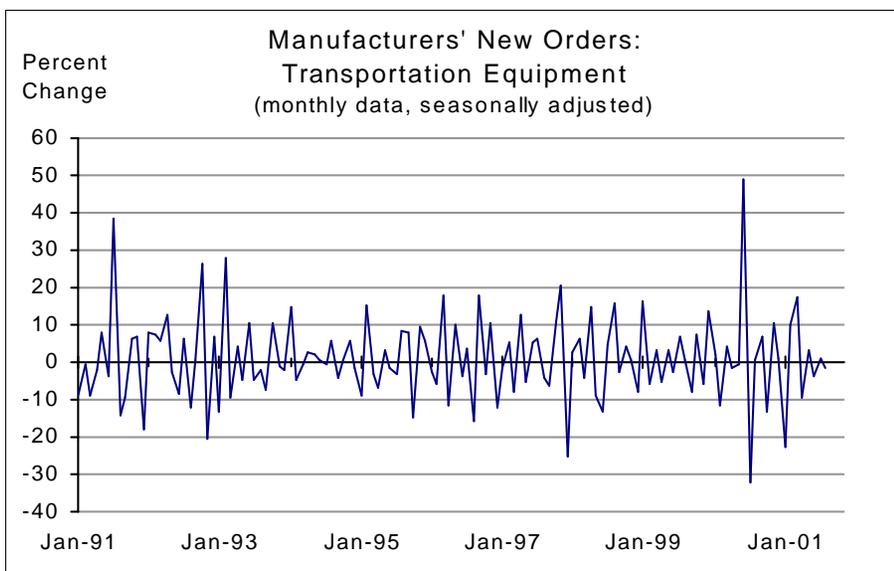


Manufacturers' New Orders	Jul-01	Aug-01
Transportation equipment (billions of dollars)	52.78	52.06
Percent change from previous month	1.03	-1.38

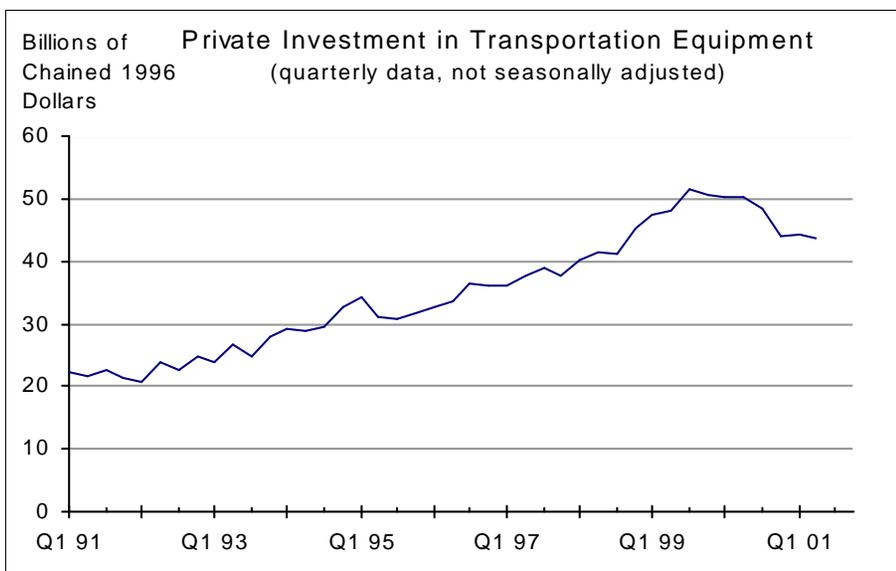
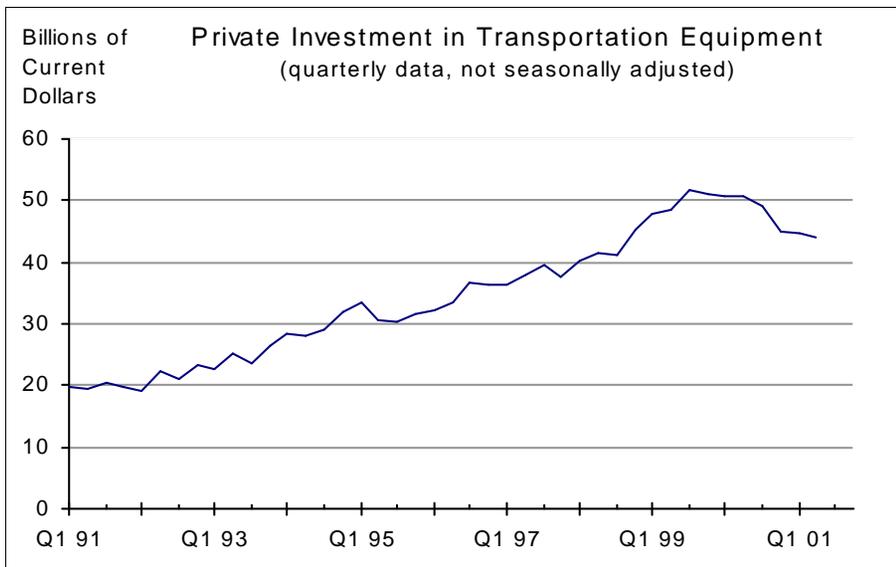
NOTE: The Census Bureau released revised historical new orders data on May 21, 2001. This report reflects those revisions.

SOURCE: U.S. Department of Commerce, Bureau of the Census, available at: <http://www.census.gov/indicator/www/m3/prel/index.htm>.

Month-to-month changes in new orders for transportation equipment indicate the level of investment in transportation and may indicate the industry outlook for transportation services. There can be a substantial time lag between ordering and delivery of equipment such as commercial airplanes and ships. New orders refer to orders placed with domestic producers of equipment.



**BUSINESS INVESTMENT IN TRANSPORTATION EQUIPMENT**



Private Investment in Transportation	Q2 00	Q2 01
Current dollars	50.90	44.08
<i>Percent change from same quarter previous year</i>	4.73	-13.41
Chained 1996 dollars	50.20	43.78
<i>Percent change from same quarter previous year</i>	4.31	-12.80

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Private investment in transportation equipment (PITE) and manufacturers' new orders for transportation equipment (NOTE) both measure business demand for transportation equipment. However, they differ from each other in the following aspects.

(1) Actual vs. potential: PITE is the actual expenditures spent on transportation equipment by business in the concerned time period, while NOTE is the net of orders and cancellations and include orders received and filled during the concerned time period as well as orders received for future delivery, which are subject to cancellation.

(2) Domestic vs. international: PITE is expenditures spent by domestic business on purchasing transportation equipment, while NOTE includes orders from other countries.

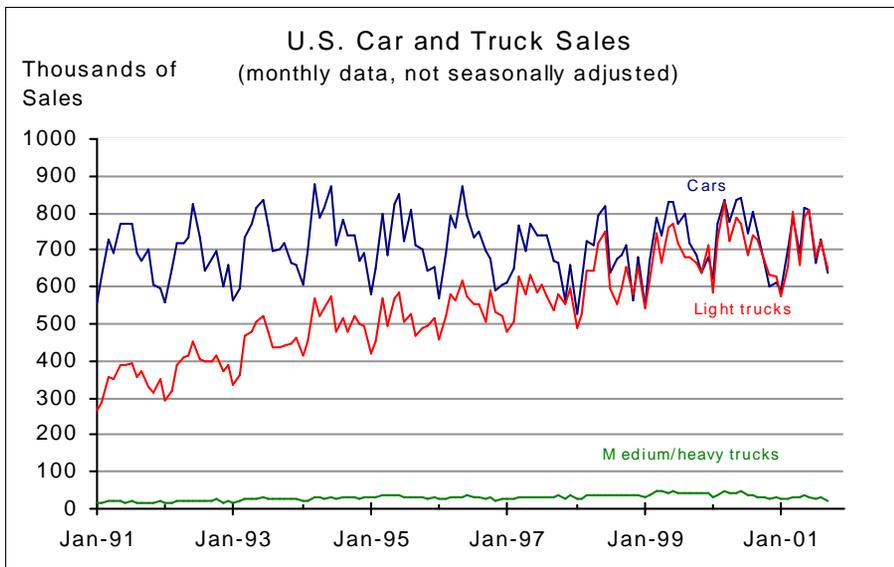
(3) Producer vs. purchaser: NOTE is orders to transportation equipment manufacturers and is measured in producer's price, while PITE is purchasers' expenditures on transportation equipment and is measured in purchaser's price, which includes transportation cost, trade margin, and excise tax, in addition to producer's price.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics estimates based on U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 2001, NIPA Tables 5.4 and 5.5.

Private investment indicates the level of demand anticipated by industry; therefore, it can be considered a leading indicator for transportation capacity and supply. The data cover both domestically produced and imported equipment.



RETAIL SALES OF MOTOR VEHICLES



Car and truck sales can be seen as an indicator of future demands to be placed on transportation infrastructure. Trends in sales for particular types of vehicles may also have implications for safety, energy usage, air pollution, and other matters. For example, the sale of light trucks has grown to almost match the level of car sales in recent years.

U.S. Car and Truck Sales	Sep-00	Sep-01
Light trucks	726,505	648,904
<i>Percent change from same month previous year</i>	6.48	-10.68
Cars	747,947	640,215
<i>Percent change from same month previous year</i>	4.48	-14.40
Medium/heavy trucks	31,859	23,428
<i>Percent change from same month previous year</i>	-28.05	-26.46

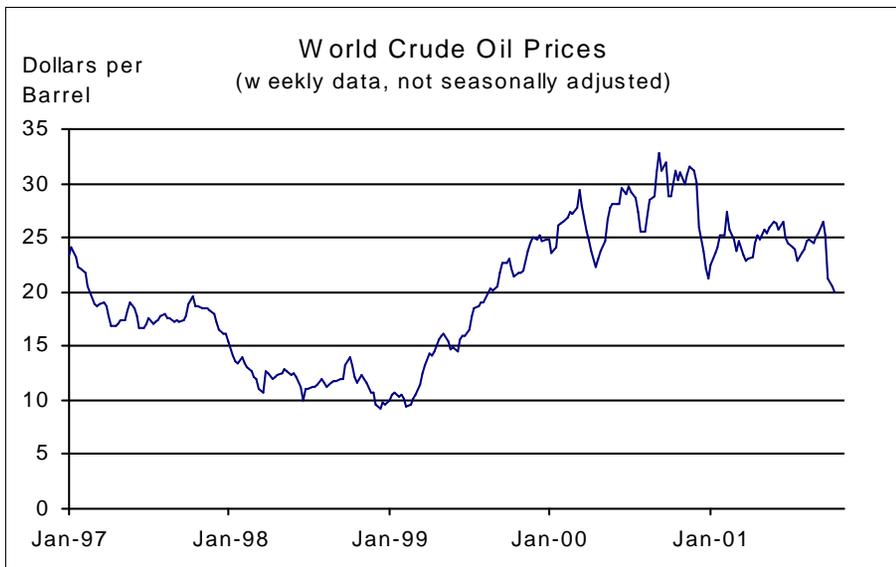
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Light trucks include pickup trucks, sport utility vehicles, vans, and minivans.

SOURCE: Lisa Smith, Ward's AutoInfoBank, 3000 Town Center Drive, Southfield, Michigan 48075.



WORLD CRUDE OIL PRICES



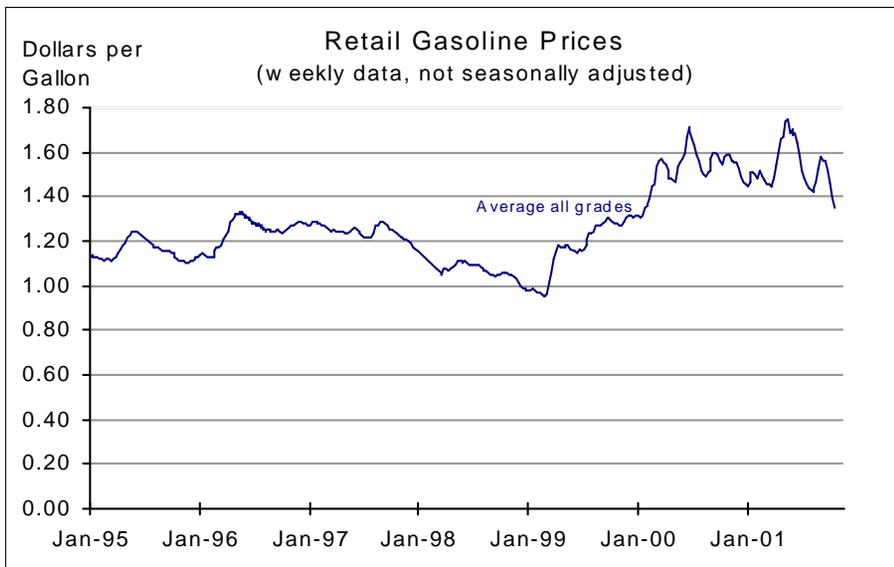
World Crude Oil	5-Oct-01	12-Oct-01
Price (dollars per barrel)	20.43	20.00
Percent change from the previous week	-3.68	-2.10

SOURCE: U.S. Department of Energy, Energy Information Administration, Crude Oil Watch, as of October 16, 2001, available at: [http://www.eia.doe.gov/pub/oil\\_gas/petroleum/data\\_publications/crude\\_watch/current/pdf/crude.pdf](http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/crude_watch/current/pdf/crude.pdf)

The world price of crude oil is the most important factor influencing domestic motor fuel prices, since oil imports make up more than half of the U.S. oil supply. Motor fuel prices, in turn, directly affect the cost of transportation. Increases in transportation costs caused by higher world crude oil prices are pure additional costs in the sense that U.S. citizens do not generally benefit.



MOTOR FUEL PRICES

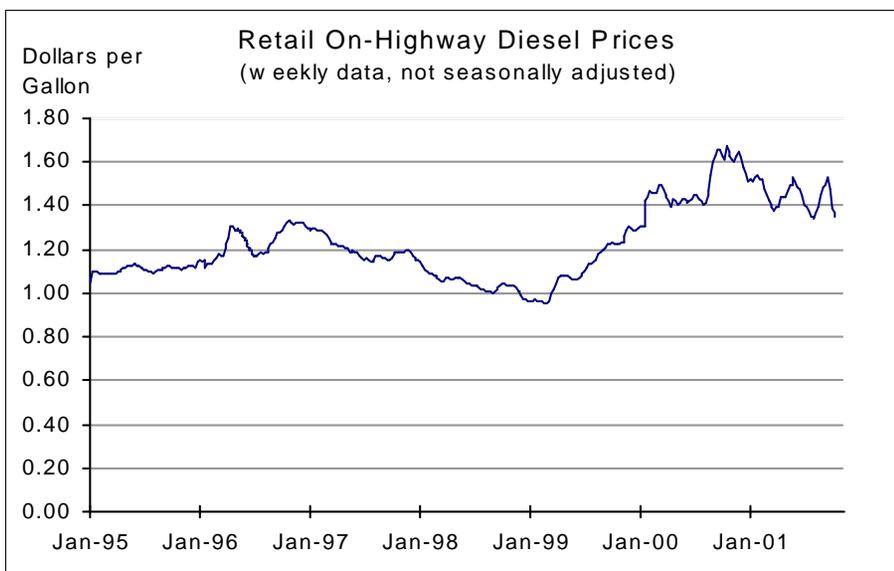


Retail Gas Prices	8-Oct-01	15-Oct-01
Average all grades (dollars/gallon)	1.393	1.351
Percent change from previous week	-4.26	-3.02

SOURCE: U.S. Department of Energy, Energy Information Administration, Weekly Retail Gasoline Prices, as of October 16, 2001, available at: [http://www.eia.doe.gov/oil\\_gas/petroleum](http://www.eia.doe.gov/oil_gas/petroleum)

Retail On-Highway Diesel Prices	8-Oct-01	15-Oct-01
Retail on-highway diesel prices (dollars/gallon)	1.371	1.353
Percent change from previous week	-1.37	-1.31

SOURCE: U.S. Department of Energy, Energy Information Administration, Weekly On-Highway Diesel Prices, as of October 16, 2001, available at: [http://www.eia.doe.gov/oil\\_gas/petroleum](http://www.eia.doe.gov/oil_gas/petroleum).



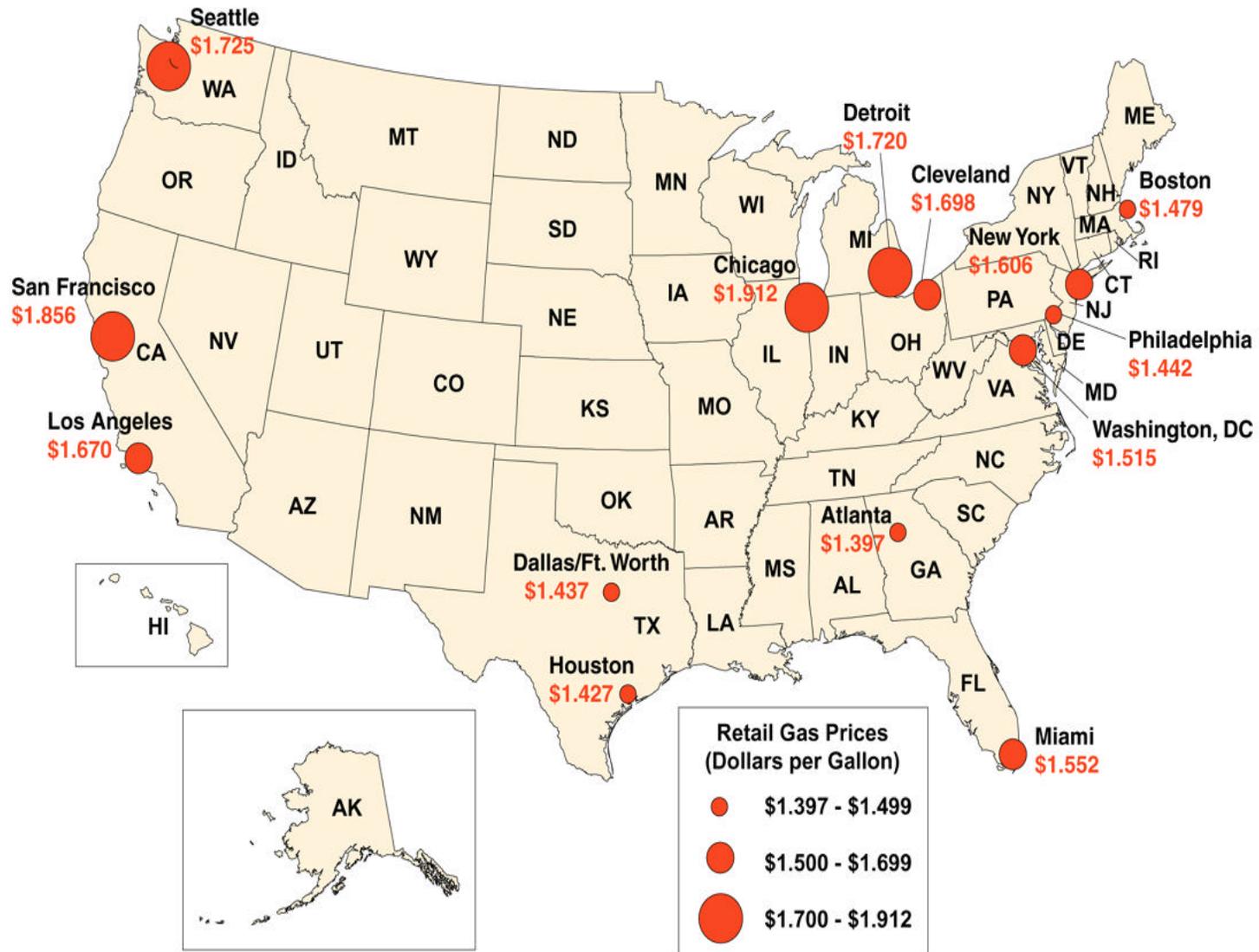
Motor fuel prices are an important cost component of highway transportation. Changes in motor fuel prices impact the behavior of both producers and consumers, and affect the demand for transportation in terms of level and modal mix.

In the United States, motor gasoline prices follow world crude oil prices more closely than motor diesel prices. Changes in motor fuel prices affect the profit margin of transportation firms, particularly trucking firms.

There are regional differences in motor fuel prices, as the following maps illustrate.



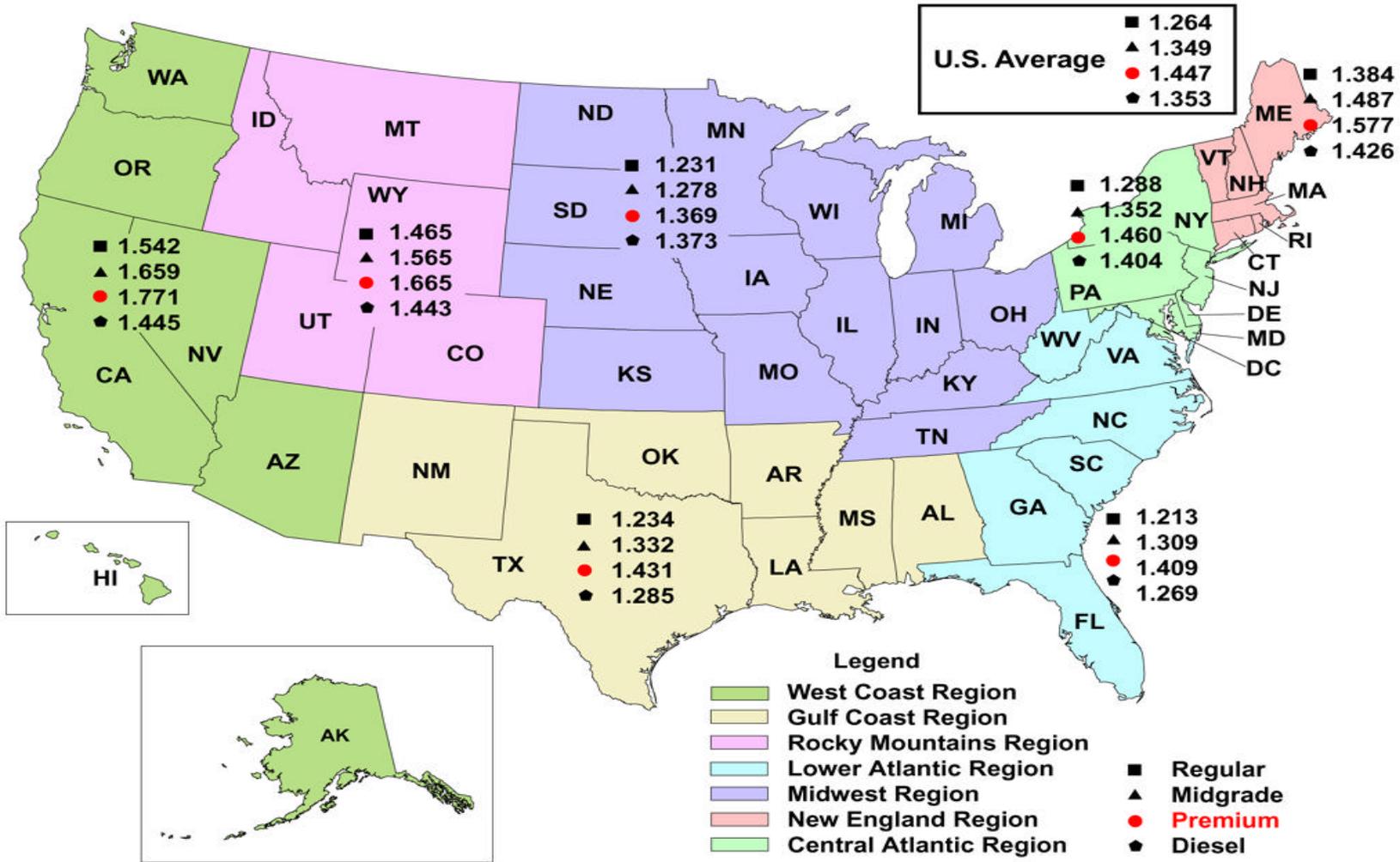
### Retail Gasoline Prices of Selected Metropolitan Areas, September 2001



SOURCE: U.S Department of Labor, Bureau of Labor Statistics, "Price & Living Conditions: Average Price Data." <http://www.bls.gov/data/home.htm>



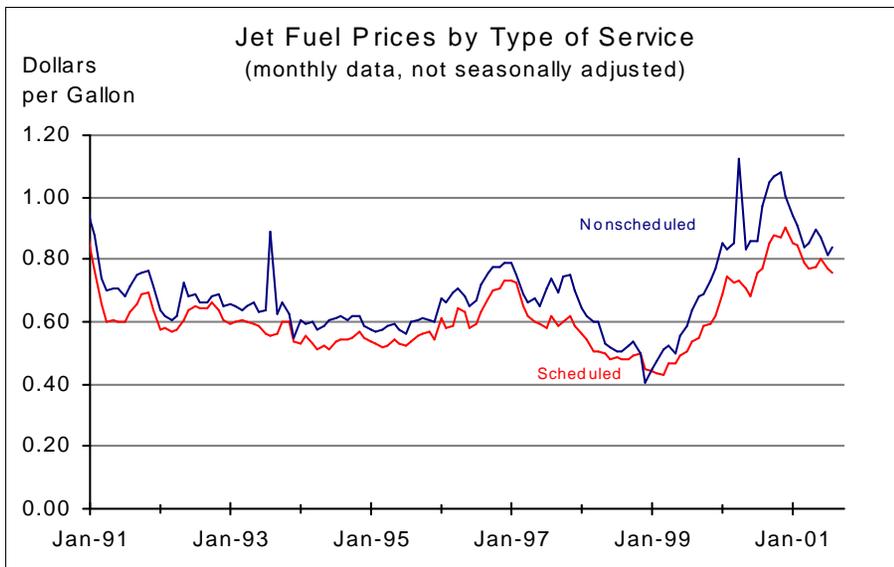
### Regional Retail Motor Fuel Prices as of October 15, 2001



SOURCE: U.S. Department of Energy, Energy Information Administration, "Retail Gasoline Prices" and "On-Highway Diesel Prices." Internet site: [http://www.eia.doe.gov/oil\\_gas/petroleum/special/gasoline\\_update/market\\_summary.html](http://www.eia.doe.gov/oil_gas/petroleum/special/gasoline_update/market_summary.html)



DOMESTIC UNIT PRICES FOR AIRLINE JET FUEL



Current Dollars per Gallon	Aug-00	Aug-01
For nonscheduled airlines	0.97	0.84
<i>Percent change from same month previous year</i>	52.23	-13.38
For scheduled airlines	0.77	0.76
<i>Percent change from same month previous year</i>	43.56	-1.36

NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data for April 2001 to August 2001 are preliminary due to late reports by carriers.

SOURCE: U.S. Department of Transportation, Bureau of Transportation Statistics.

Jet fuel prices reported to the Bureau of Transportation Statistics differ from producer prices. Reports to BTS show the cost per gallon of fuel used by an airline during the month rather than the price charged by a producer on a single day. Fuel costs for scheduled airline services reflect contractual and storage advantages available to large buyers, while fuel costs for nonscheduled airline services reflect economic conditions for smaller buyers.



VALUE OF U.S. IMPORTS AND EXPORTS



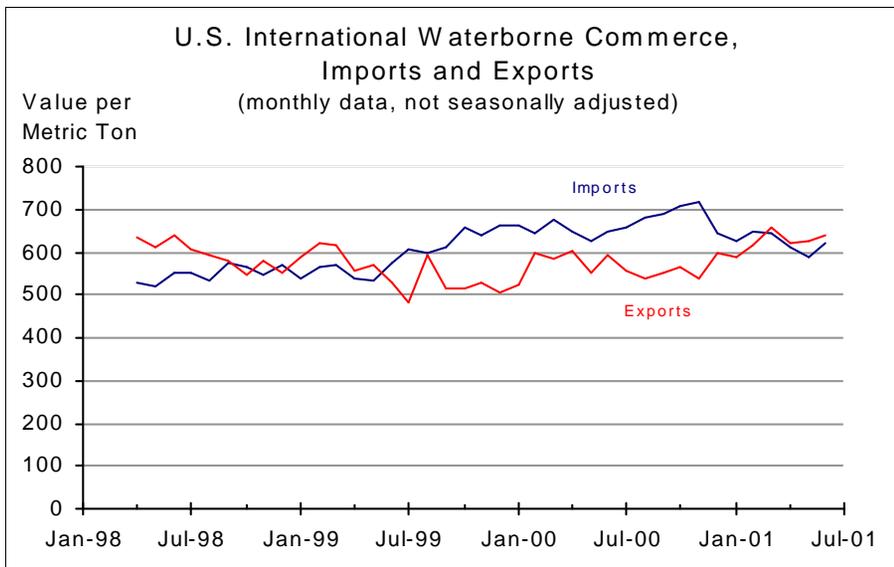
U.S. International Trade In Goods	Jun-01	Jul-01
Imports (millions of dollars)	96,518	94,200
<i>Percent change from previous month</i>	<i>-0.80</i>	<i>-2.40</i>
Exports (millions of dollars)	60,822	58,800
<i>Percent change from previous month</i>	<i>-3.22</i>	<i>-3.32</i>

SOURCE: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division data, available at: <http://www.census.gov/foreign-trade/www/statistics.html>.

International trade represents a growing share of the U.S. economy. Changes in the level of both imports and exports affect the level of demand for transportation services. The value of U.S. imports historically have been higher than the value of U.S. exports, but the gap has widened recently.



VALUE PER METRIC TON OF U.S. WATERBORNE IMPORTS AND EXPORTS



Approximately 40 percent by value (75 percent in terms of tonnage) of cargo carried in U.S. foreign trade is carried on the water.

Value Per Metric Ton	Jun-00	Jun-01
Exports	594	641
<i>Percent change from same month previous year</i>	12.65	7.79
Imports	649	622
<i>Percent change from same month previous year</i>	13.18	-4.06

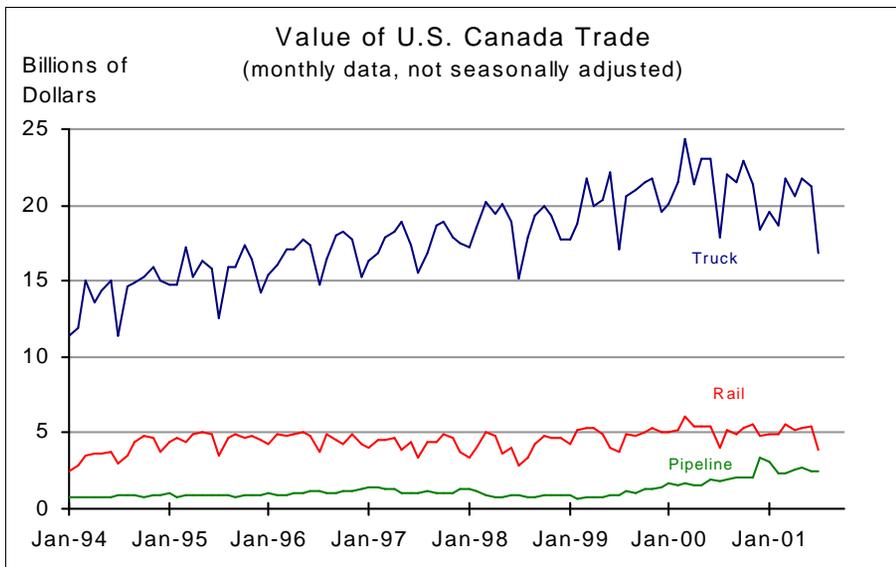
NOTES: The current value is compared to the value from the same period in the previous year to account for seasonality.

Data reported prior to the 3rd quarter of 1998 were collected and reported by the U.S. Department of Commerce and may not be completely comparable to data reported by the Maritime Administration.

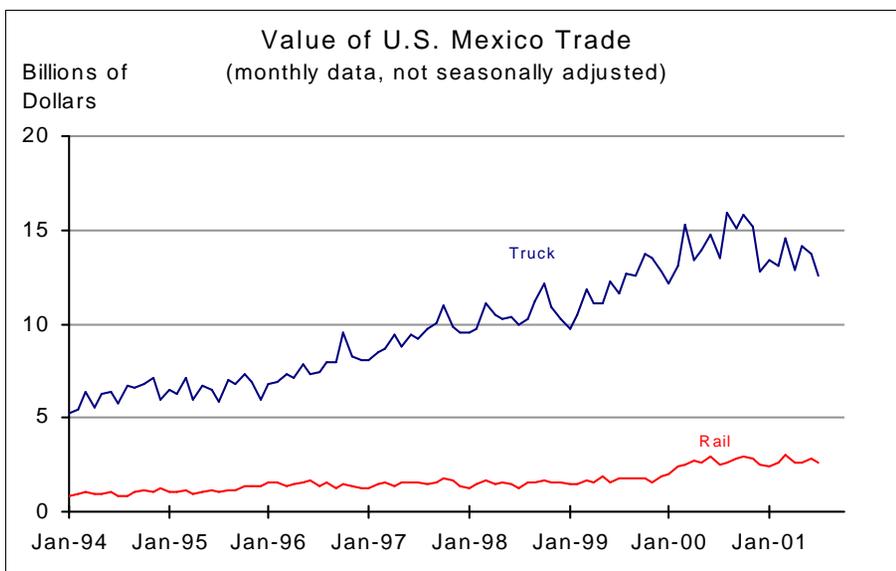
SOURCE: U.S. Department of Transportation, Maritime Administration, Waterborne Databank, and U.S. Department of Commerce, Bureau of Census, Foreign Trade Division, U.S. Waterborne Exports and General Imports, various issues, available at <http://www.marad.dot.gov/statistics/usfwts/index.html>.



U.S. SURFACE TRADE WITH CANADA AND MEXICO



U.S. - Canada Trade	Jul-00	Jul-01
Truck (millions of dollars)	17,912	16,823
<i>Percent change from same month previous year</i>	5.01	-6.08
Rail (millions of dollars)	3,977	3,841
<i>Percent change from same month previous year</i>	7.13	-3.42
Pipeline (millions of dollars)	1,837	2,463
<i>Percent change from same month previous year</i>	90.25	34.10



U.S. - Mexico Trade	Jul-00	Jul-01
Truck (millions of dollars)	13,525	12,605
<i>Percent change from same month previous year</i>	16.15	-6.80
Rail (millions of dollars)	2,500	2,566
<i>Percent change from same month previous year</i>	38.21	2.66
Pipeline (millions of dollars)	39	4
<i>Percent change from same month previous year</i>	218.37	-89.58

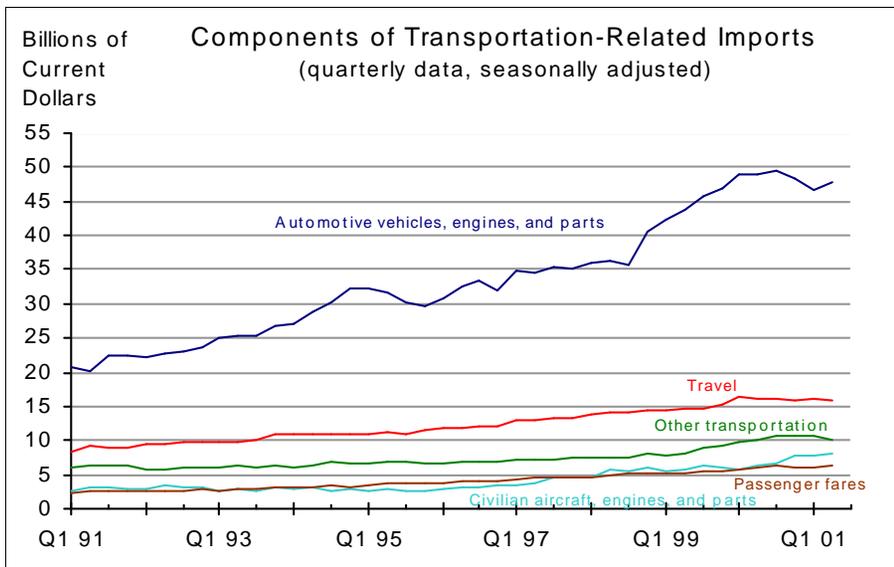
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: Data obtained from the U.S. Department of Commerce, Census Bureau by the U.S. Department of Transportation Bureau of Transportation Statistics, Transborder Surface Freight Dataset, available at: <http://www.bts.gov/ntda/tbscd/prod.html>.

Surface freight is useful in monitoring the value and modal patterns of trade with Canada and Mexico, our North American Free Trade Agreement (NAFTA) partners. Canada is our largest trading partner, while Mexico now ranks second. Surface modes include not only truck, rail, and pipeline (shown here), but also government mail and other miscellaneous modes.



VALUE OF TRANSPORTATION-RELATED IMPORTS



The transportation sector’s trade balance has been negative for many years. The strong growth of imports, together with much slower growth of exports, have increased the transportation-related trade deficit.

Imports (billions of dollars)	Q1 01	Q2 01
Transportation-related Total	87.18	88.13
<i>Percent change from previous quarter</i>	-1.61	1.09
Automotive & Parts	46.73	47.85
<i>Percent change from previous quarter</i>	-3.16	2.41
Travel	16.18	15.95
<i>Percent change from previous quarter</i>	1.41	-1.39
Other	10.53	10.13
<i>Percent change from previous quarter</i>	-1.86	-3.80
Civilian Aircraft & Parts	7.75	7.93
<i>Percent change from previous quarter</i>	1.31	2.26
Passenger Fares	6.00	6.28
<i>Percent change from previous quarter</i>	-0.41	4.58

NOTES: “Other transportation” imports include payments for freight transportation services and port services.

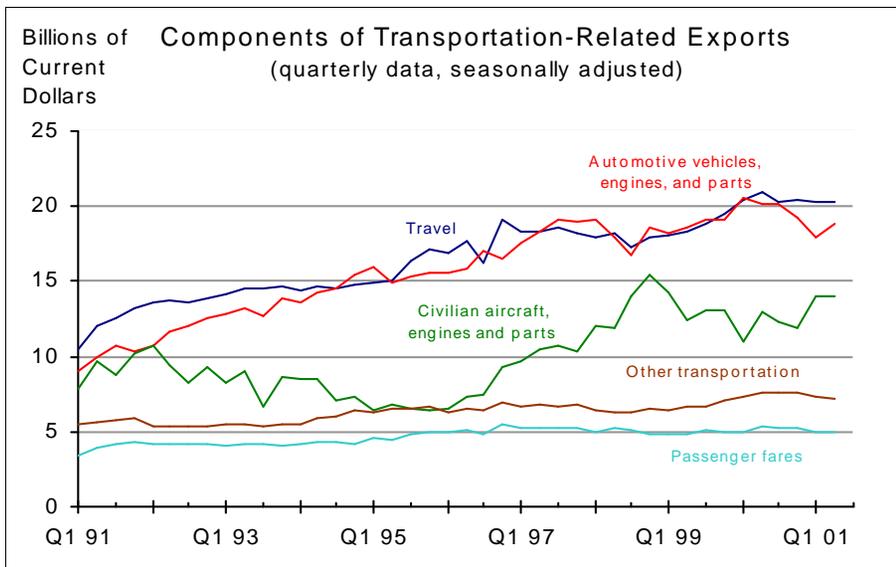
Passenger fares include international transportation fares, particularly, air fares and ocean liner fares.

Travel includes intercity and local fares within a country, hotel and restaurant, admission fees, and souvenir expenditures.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 2001, NIPA Table 4.3.



VALUE OF TRANSPORTATION-RELATED EXPORTS



Transportation-related exports contribute to U.S. GDP and employment, which help retain the U.S. industrial base.

Exports (billions of dollars)	Q1 01	Q2 01
Transportation-related Total	64.55	65.28
<i>Percent change from previous quarter</i>	0.35	1.12
Travel	20.30	20.28
<i>Percent change from previous quarter</i>	-0.49	-0.12
Automotive & parts	17.95	18.80
<i>Percent change from previous quarter</i>	-6.99	4.74
Civilian Aircraft & Parts	14.03	14.00
<i>Percent change from previous quarter</i>	18.35	-0.18
Other	7.35	7.25
<i>Percent change from previous quarter</i>	-3.29	-1.36
Passenger Fares	4.93	4.95
<i>Percent change from previous quarter</i>	-4.83	0.51

NOTES: "Other transportation" exports include payments for freight transportation services and port services.

Passenger fares include international transportation fares, particularly, air fares and ocean liner fares.

Travel includes intercity and local fares within a country, hotel and restaurant, admission fees, and souvenir expenditures.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 2001, NIPA Table 4.3.

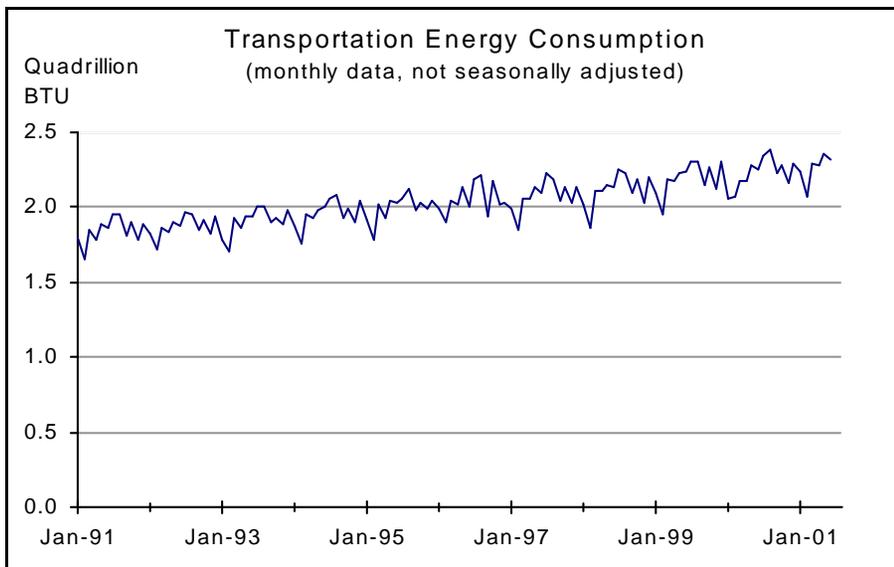


# Human and Natural Environment

	<b>Page</b>
Transportation Energy Use	89
Transportation Energy Use Per Dollar of GDP	90
Average Motor Vehicle Miles Per Gallon	91
U.S. Carbon Dioxide Emissions	92
Air Pollutant Emissions from Transportation	93
Modal Shares of Key Air Pollutants from Transportation	93
Crude Oil and Petroleum Products Spills in U.S. Waters	94



TRANSPORTATION ENERGY USE



Transportation Energy Consumption	Jun-00	Jun-01
Quadrillion BTU	2.26	2.31
Percent change from same month previous year	1.07	2.44

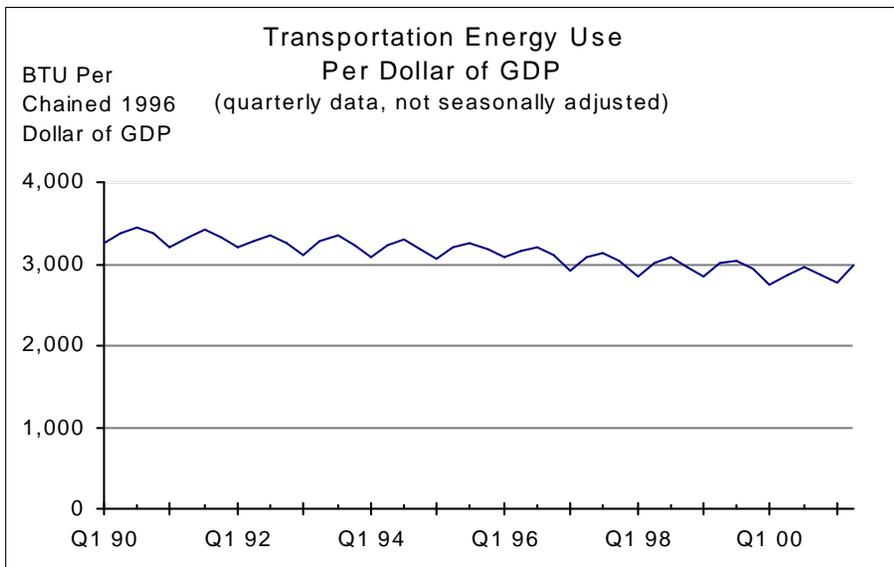
NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, available at: <http://www.eia.doe.gov/mer>.

Transportation accounts for about 28 percent of U.S. energy consumption. Petroleum accounts for nearly all (about 97 percent) of the transportation sector’s energy use. Petroleum is a major component of transportation costs, and its usage affects the environment. Because more than half of the U.S. petroleum supply is imported, there are also national security concerns for assuring petroleum supplies.



TRANSPORTATION ENERGY USE PER DOLLAR OF GDP



Transportation Energy Use Per \$ of GDP	Q2 00	Q2 01
Thousand BTU per Dollar of GDP	2,878	2,994
Percent change from same quarter previous year	-4.67	4.05

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

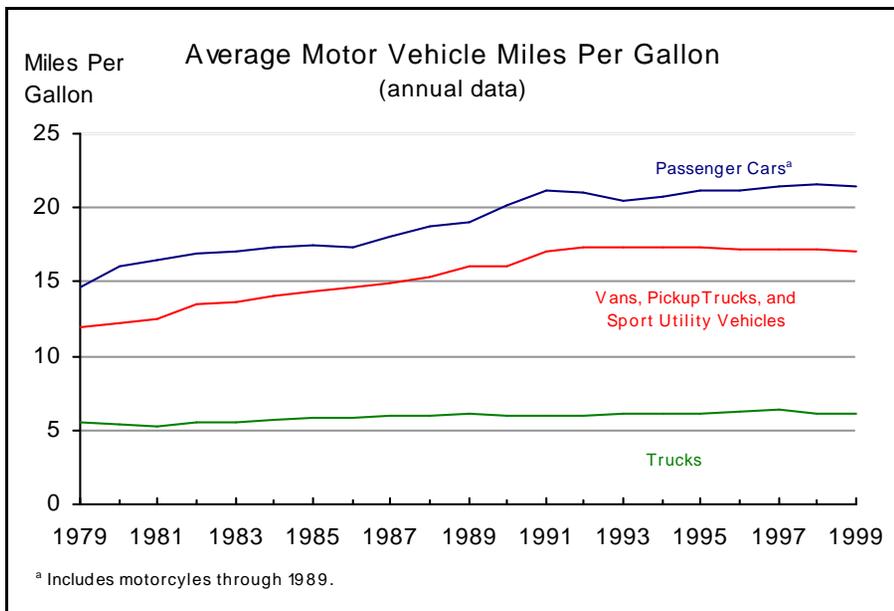
SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, available at: <http://www.eia.doe.gov/mer>.

BTU - British Thermal Unit  
The average heat content of motor gasoline is 129,024 BTU per gallon. One quadrillion BTU is equivalent to 7.75 billion gallons of motor gasoline.

This indicator shows the level of energy use for transportation with respect to production of GDP and the levels of personal consumption in the United States over time. Transportation energy use reflects the seasonality of personal travel.



**AVERAGE MOTOR VEHICLE MILES PER GALLON**



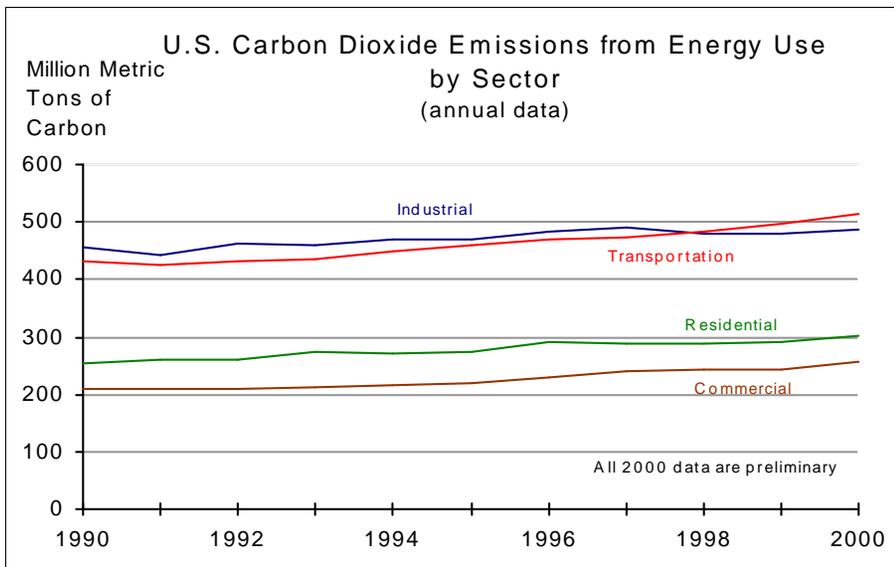
Average Motor Vehicle Miles Per Gallon	1998	1999
Passenger cars	21.6	21.4
<i>Percent change from previous year</i>	<i>0.47</i>	<i>-0.93</i>
Vans, Pickup trucks, SUVs	17.2	17.1
<i>Percent change from previous year</i>	<i>0</i>	<i>-0.58</i>
Trucks	6.1	6.1
<i>Percent change from previous year</i>	<i>-4.69</i>	<i>0</i>

SOURCES: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review. Available at <http://www.eia.doe.gov/mer>

Since 1979, the average fuel rate of passenger cars, vans, pickup trucks, and sport utility vehicles have had an upward trend. In the 1990s, the fuel rates reached a more stable trend, and are now better than a decade ago. The fuel rates for trucks have not changed significantly. (The average fuel rate is calculated by dividing fuel consumption by mileage of a motor vehicle.)



U.S. CARBON DIOXIDE EMISSIONS



U.S. Carbon Dioxide Emissions	1999	2000*
Transportation (MMTC)	496	513
Percent change from previous year	2.90	3.43
Industrial (MMTC)	481	488
Percent change from previous year	0.21	1.46
Residential (MMTC)	290	301
Percent change from previous year	0.35	3.79
Commercial (MMTC)	244	256
Percent change from previous year	0.00	4.92

\* Preliminary estimates

SOURCES: U.S. Department of Energy, Energy Information Administration, *Emissions of Greenhouse Gases in the United States, 1990-1999*. Available at: <http://www.eia.doe.gov/oiaf/1605/ggrpt/index.html>. For 2000 numbers: U.S. Department of Energy, Energy, Information Administration, Energy-CO2 Flash estimate, available at: <http://www.eia.doe.gov/oiaf/1605/flash/sld001.htm>

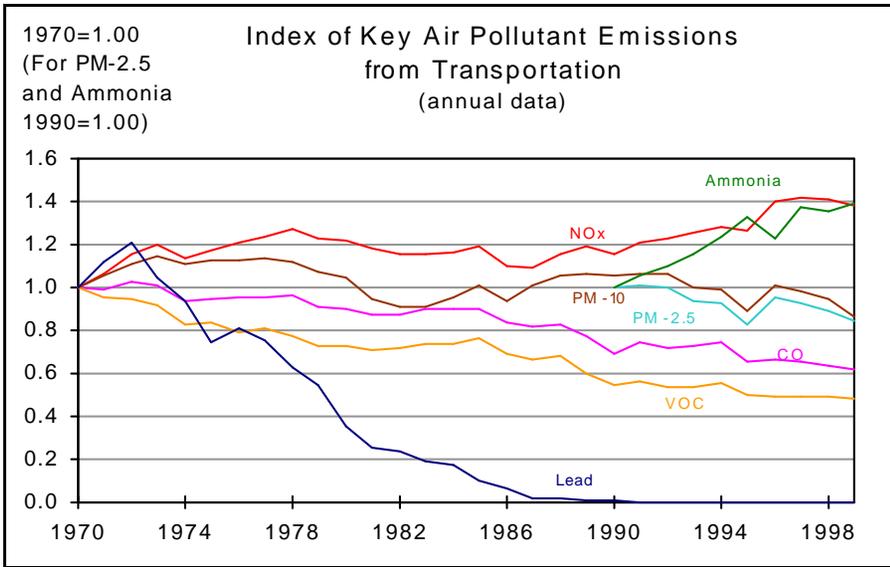
MMTC = million metric tons of carbon  
Tons of carbon can be converted to tons of carbon dioxide by multiplying by 3.667.

Carbon dioxide is a major greenhouse gas emitted from the burning of fossil fuels.

The transportation sector surpassed the industrial sector's carbon dioxide emissions for the first time in 1998. Historically, the industrial sector was the largest emitter of carbon dioxide.

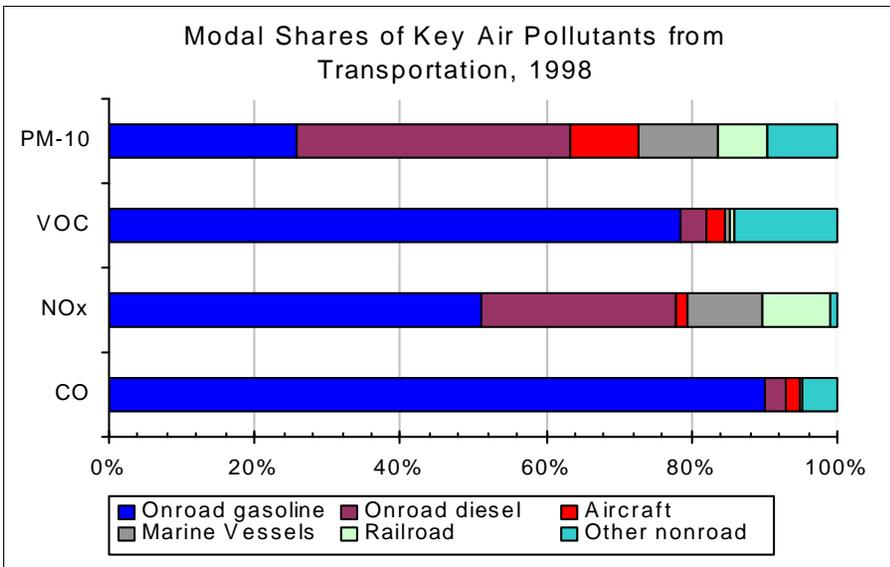


**AIR POLLUTANT EMISSIONS FROM TRANSPORTATION**



Thousands of Short Tons of Transportation Air Emissions	1998	1999
Carbon monoxide (CO)	58,108	55,773
Oxides of nitrogen (NOx)	11,522	11,306
Volatile organic compounds (VOC)	6,829	6,681
Particulate matter < 10 microns (PM-10)	475	458
Particulate matter < 2.5 microns (PM-2.5)	387	368
Ammonia	262	270
Lead	0.5	0.5

SOURCE: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards (OAQPS), National Emissions Inventory, available at: <http://www.epa.gov/ttn/chief/trends/html>

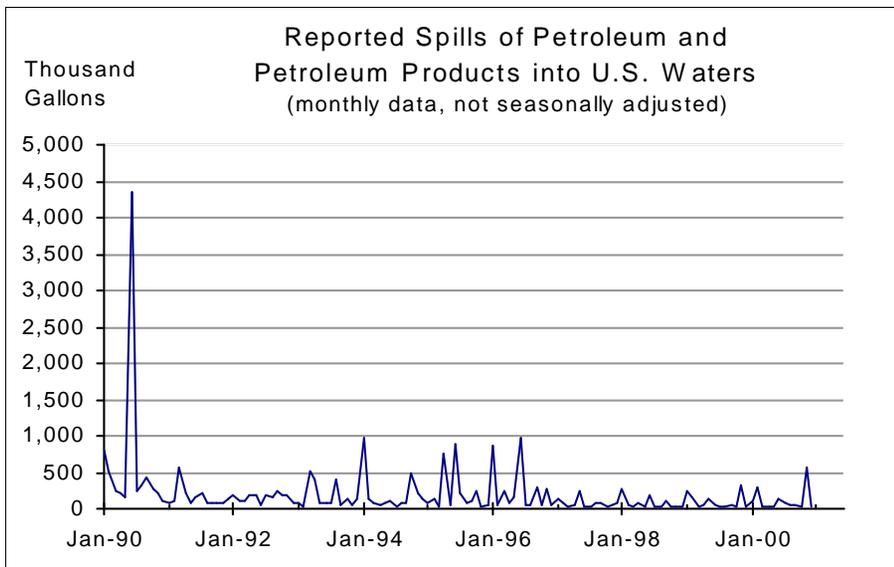


Despite rapid growth in vehicle use over the past two decades, emissions of carbon monoxide (CO) and volatile organic compounds (VOC) have declined, and lead emissions have been almost eliminated, leading to improved air quality. There have been reductions in particulate emissions (PM) at the 10 micron classification. Only emissions of nitrogen oxides (NO<sub>x</sub>) remain above 1970 levels. (Ammonia and PM-2.5 were added to the list of regulated pollutants recently.)

Onroad vehicles contribute the largest share of air pollutants among all modes.



**CRUDE OIL AND PETROLEUM PRODUCTS SPILLS IN U.S. WATERS**



NOTE: The spike in 1990 was caused by one tanker spill in the Gulf of Mexico.

Crude petroleum and petroleum products spills are costly to the environment and to society. Major oil spills are infrequent but can have large adverse impacts. Between 1995 and 1999, transportation was responsible for roughly 72 percent of the total gallons reported spilled. The remainder is from fixed facilities on and off shore; however, many of these facilities (such as marinas and ports) are transportation-related.

Data are only for reported spills. Unreported spills (such as from improper disposal of used motor oil into storm drains) also contribute to oil pollution, but the total volume of these spills is not known.

Oil Spills	Dec-99	Dec-00
Gallons spilled	26,796	21,056
Percent change from same month previous year	73.31	-21.42

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

Annual data from 1995 to 1999 were used to calculate the average percentage of transportation-related spills.

SOURCE: U.S. Coast Guard, Annual Data and Graphics for Oil Spills, available at: <http://www.uscg.mil/hq/g-m>

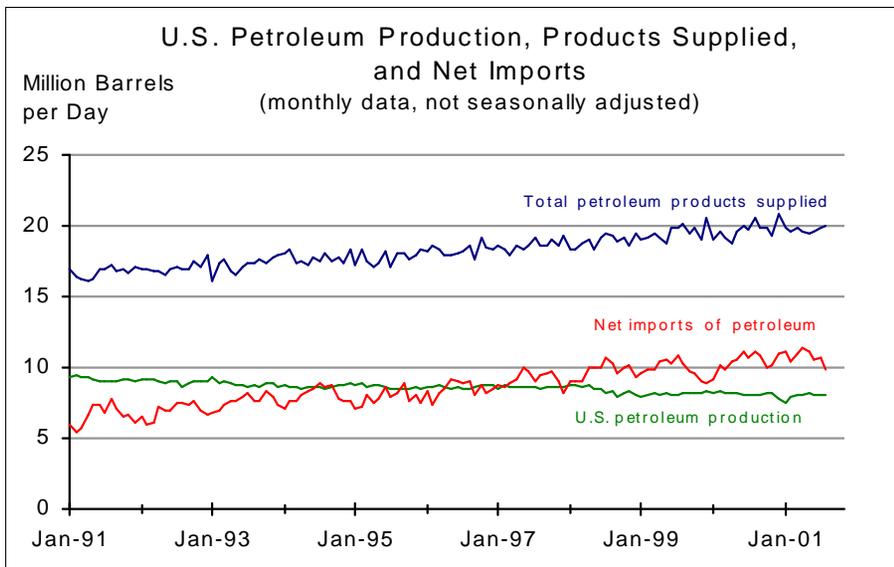


# National Security

	Page
U. S. Dependence on Oil Imports	96
Motor Gasoline Consumption and Production	97
Motor Gasoline Stocks	98
U.S. Coast Guard Drug Seizures	99
U.S. Coast Guard Drug Seizures: Value Seized	99
Interdictions of Illegal Aliens	100



**U.S. DEPENDENCE ON OIL IMPORTS**



The United States now imports more petroleum than it produces domestically. U.S. dependence on foreign sources for a product of such critical importance to the U.S. economy and society has prompted national security concerns.

NOTE: Petroleum products supplied is a proxy for consumption.

Total Petroleum Products Supplied	Aug-00	Aug-01
Total (thousand barrels per day)	20,496	19,993
Percent change from same month previous year	2.01	-2.45

Net Petroleum Imports	Aug-00	Aug-01
Total (thousand barrels per day)	11,099	9,799
Percent change from same month previous year	8.39	-11.71

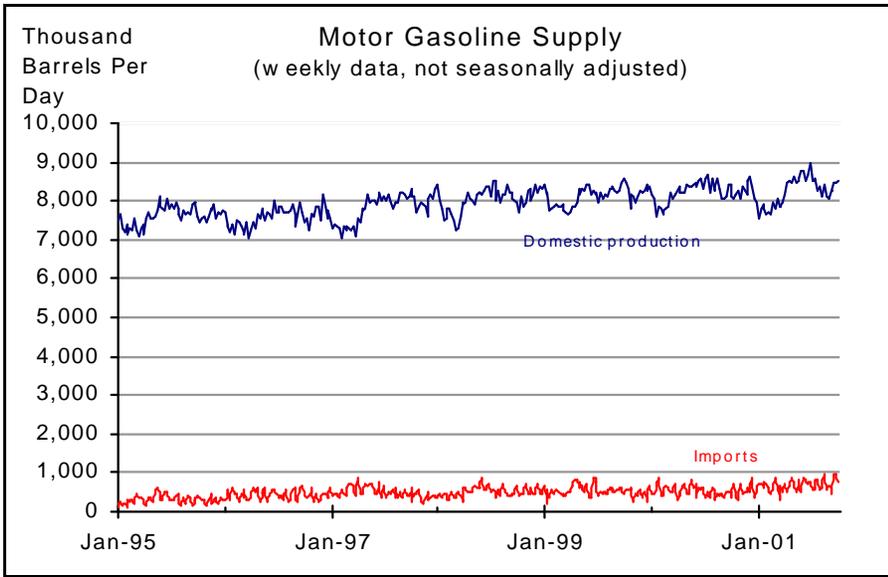
U.S. Petroleum Production	Aug-00	Aug-01
Total (thousand barrels per day)	8,117	8,084
Percent change from same month previous year	-1.04	-0.41

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Energy, Energy Information Administration, *Monthly Energy Review*, September 2001, Available at: <http://www.eia.doe.gov/mer>.



**U.S. MOTOR GASOLINE PRODUCTION AND CONSUMPTION**



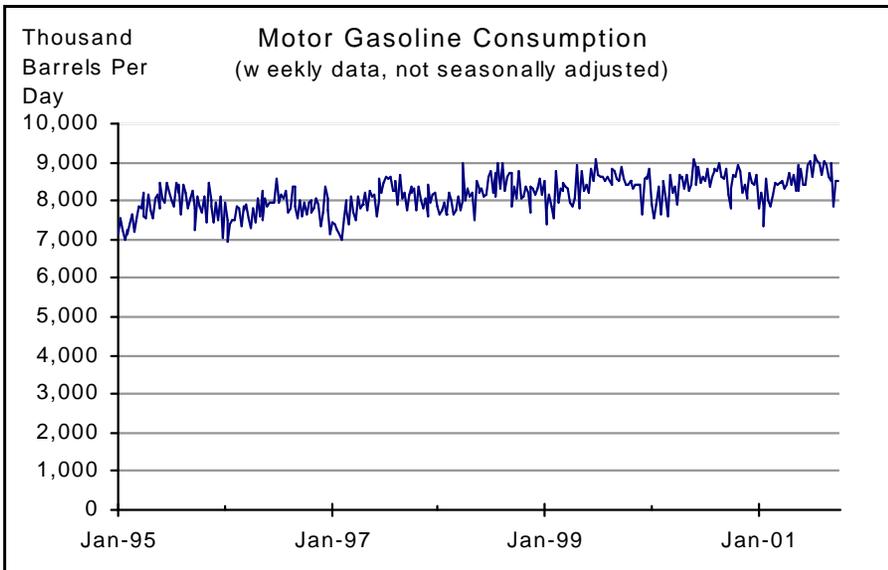
Motor Gasoline Supply (thousand barrels per day)	28-Sep-01	5-Oct-01
Production from domestic sources	8,455	8,499
<i>Percent change from previous week</i>	0.12	0.52
Imports	955	773
<i>Percent change from previous week</i>	2.14	-19.06

Motor Gasoline Consumption (thousand barrels per day)	28-Sep-01	5-Oct-01
Motor gasoline consumed	8,514	8,500
<i>Percent change from previous week</i>	8.68	-0.16

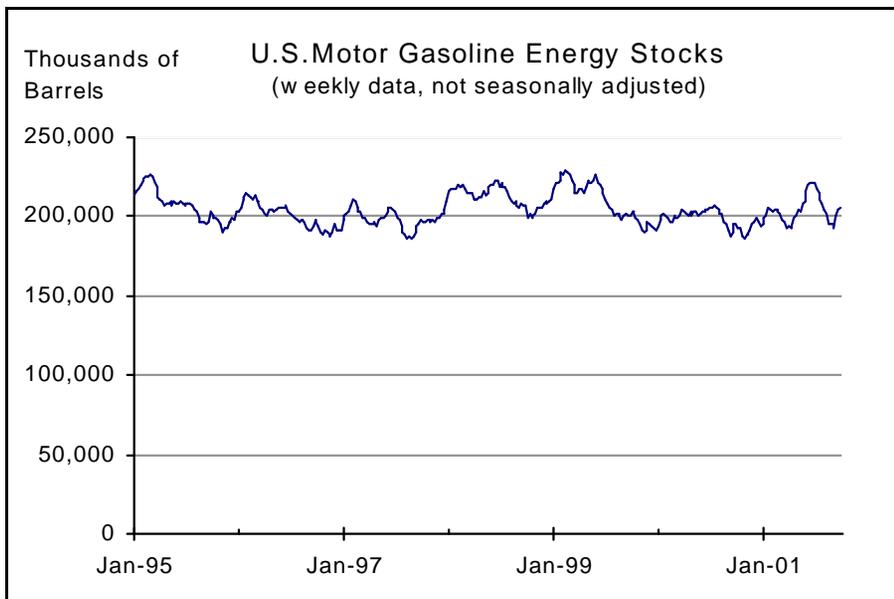
The consumption of motor gasoline in the United States is strongly seasonal, with more consumed in the summer and less consumed in the winter. On a yearly basis, the consumption of motor gasoline in the United States has been steadily increasing as vehicle-miles increased. In the week of July 20 this year, the consumption of motor gasoline reached a record high of 9.2 million barrels per day. Thereafter, the consumption has decreased. In the most recent reporting week (5-Oct-01), the consumption was 8.5 million barrels per day, 8 percent lower than its peak in July.

Motor gasoline (more than 90 percent) is refined domestically. Anticipating the strong demand in summer, the motor gasoline supply reached its historical high in the week of June 29 this year with an average of 9.7 million barrels per day. By the beginning of October, motor gasoline supply declined to 8.4 million barrels per day, 15 percent lower than two months ago.

SOURCE: U.S. Department of Energy, Energy Information Administration, October 2001, Available at: [http://www.eia.doe.gov/oil\\_gas/petroleum/info\\_glance/gasoline.html](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/gasoline.html)



MOTOR GASOLINE STOCKS



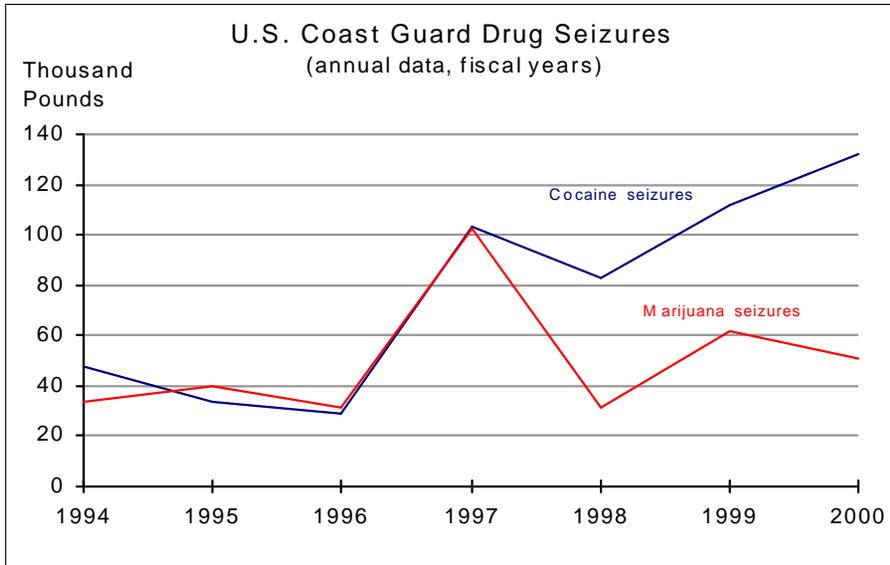
Motor Gasoline Stocks (thousands of barrels)	28-Sep-01	5-Oct-01
Stocks	203,912	206,117
Percent change from previous week	1.54	1.08

SOURCE: U.S. Department of Energy, Energy Information Administration, October 2001, Available at: [http://www.eia.doe.gov/oil\\_gas/petroleum/info\\_glance/gasoline.html](http://www.eia.doe.gov/oil_gas/petroleum/info_glance/gasoline.html)

Motor gasoline supply and consumption are balanced through changes in motor gasoline stocks. Motor gasoline stocks in the United States, average about 200 billion barrels. The recent high of motor gasoline stocks was in the week of June 29 of this year, when the system prepared to meet higher demand in the summer. Since then the stocks have decreased. In the beginning of October, motor gasoline stocks had increased to 206 billion barrels.

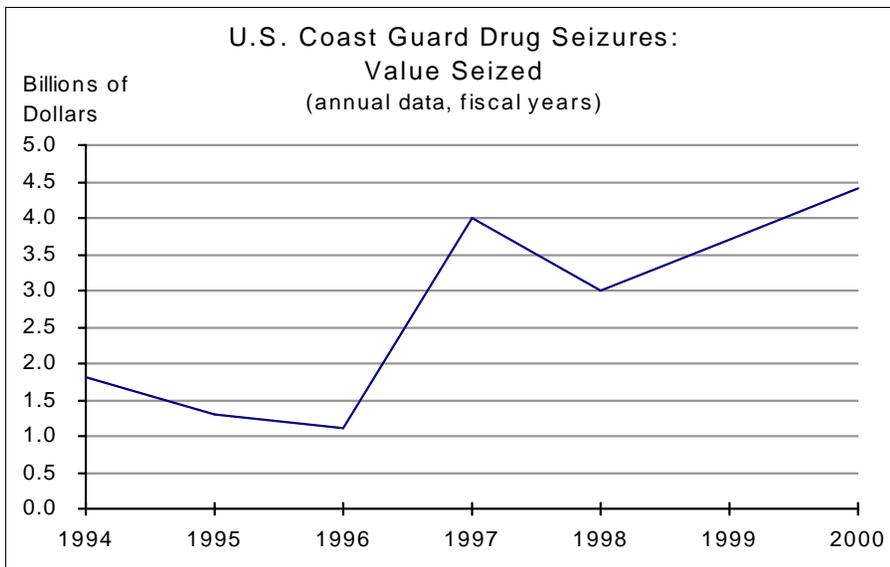


**U.S. COAST GUARD DRUG SEIZURES**



Coast Guard Drug Seizures	1999	2000
Cocaine seized (thousand pounds)	112	132
Percent change from previous year	35.18	18.62
Marijuana seized (thousand pounds)	62	50
Percent change from previous year	95.94	-17.95

Coast Guard Drug Seizures	1999	2000
Value seized (billions of dollars)	3.70	4.40
Percent change from previous year	23.33	18.92



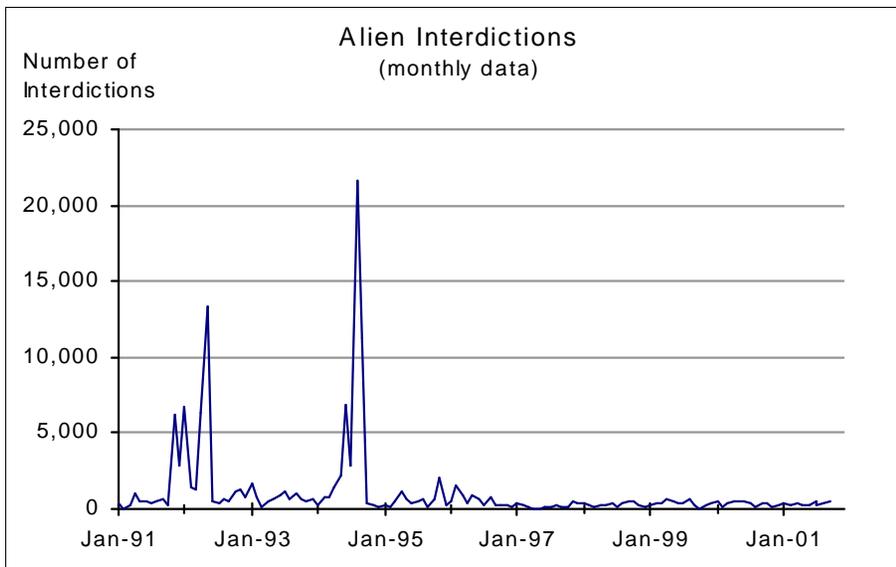
The U.S. Coast Guard is the key federal agency responsible for U.S. maritime drug interdictions. The Coast Guard's mission is to reduce the supply of drugs from the source by denying smugglers the use of air and maritime routes in the Transit Zone, a six million square mile area, including the Caribbean, Gulf of Mexico and Eastern Pacific. The Coast Guard is responsible for nearly 25 percent of all U.S. government seizures of cocaine and marijuana each year.

NOTE: During fiscal year 1997, additional Office of National Drug Control Policy (ONDCP) funding allowed the Coast Guard to commit more than 102,000 ship and aircraft resource hours to dedicated counter drug patrols -nearly 25 percent more than the previous year—accounting for the increase in seizures during that year.

SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Law Enforcement, at <http://www.uscg.mil/hq/g-cp/comrel/factfile/>.



INTERDICTIONS OF ILLEGAL ALIENS



Alien Interdictions	Sep-00	Sep-01
Total	333	469
Percent change from previous year	14.04	40.84

NOTE: The current value is compared to the value from the same period in the previous year to account for seasonality.

SOURCE: U.S. Department of Transportation, U.S. Coast Guard, Office of Law Enforcement, available at: <http://www.uscg.mil/hq/g-o/g-opl/mle/amiostats1.htm>.

In recent years, most interdictions have involved people from Haiti, the People’s Republic of China (PRC), the Dominican Republic, and Cuba. Recently, many interdictions have occurred in the Guam region. Guam is a gateway to the continental U.S. from the PRC.

NOTE: In May 1992, there were 13,103 Haitian interdictions. In August 1994, there were 21,300 Cuban interdictions.

Interdiction– the interception and stopping of illegal aliens attempting to enter the United States (in this case by water or air).



### AN ANALYSIS OF HIGHWAY HAZARDOUS MATERIALS INCIDENTS

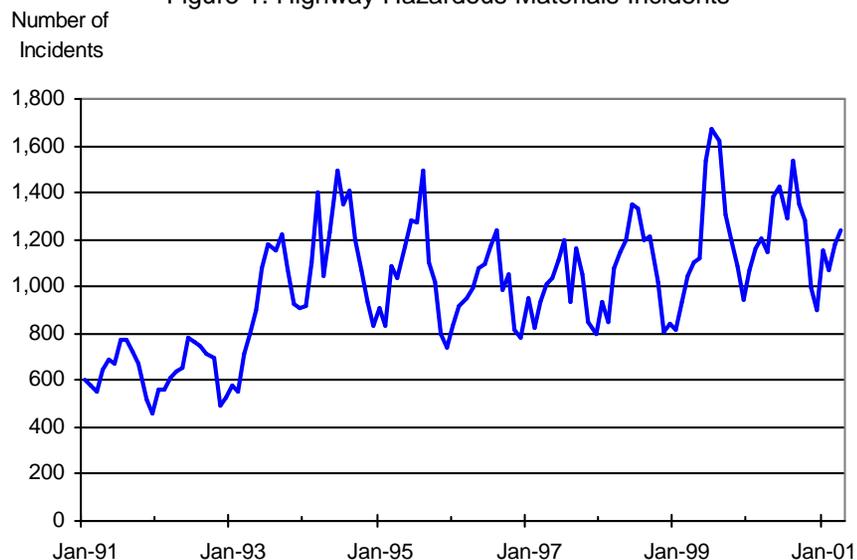
The hazardous materials transportation safety program relies on the Department of Transportation’s Hazardous Materials Incident Report to gather basic information on incidents that occur during transportation and that meet specified criteria as required in the Federal hazardous materials transportation law. Part 171 of Title 49, Code of Federal Regulations (49 CFR) contains the incident reporting requirements of carriers of hazardous materials.

An ‘incident’ is reported if there is any unintentional release of hazardous material while in transportation, which includes loading, unloading and temporary storage. Since most reported incidents occur on the highways, the highway hazardous material incidents were selected as a focus of study. Figure 1 illustrates the monthly hazardous materials incidents experienced on highways for the past decade.

increase, or rather a shift upwards to achieve a new stable level of incidents in the long run? To first answer this question, the seasonal component needs to be removed.

As is true for most transportation data, the highway incidents exhibit strong seasonal variation. Decomposition of the time series data provides a means for viewing the long-term behavior on the data separately from the seasonal component of the data. Analysis of the data revealed that the monthly seasonality is relatively consistent through the years; therefore, it is appropriate to average the same months over time to show the average monthly variation. Figure 2 provides the result of that analysis.

Figure 1. Highway Hazardous Materials Incidents



An initial examination of the data displayed in Figure 1 shows some degree of an increase of the number of incidents. But does this indicate a continuing

Figure 2. Monthly Seasonal Variation for Highway Hazardous Materials Incidents

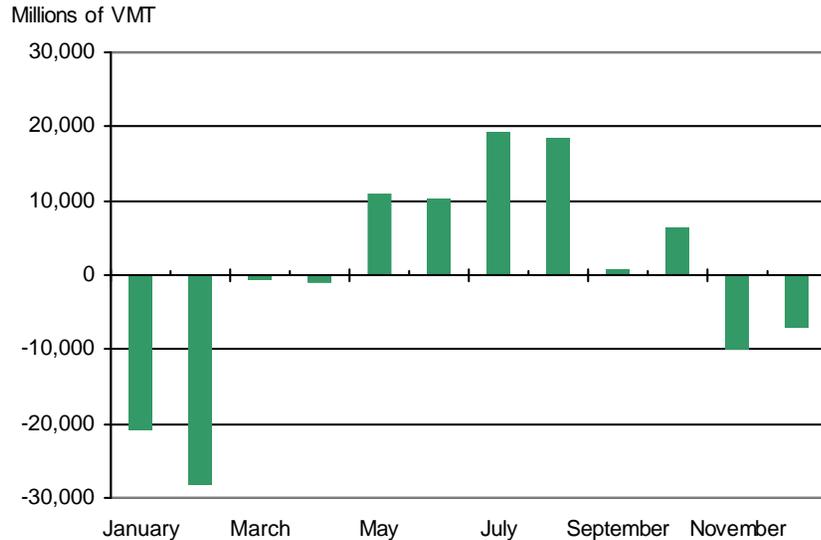


The results in Figure 2 are not surprising; the summer months experience a higher than average number of incidents, whereas the winter months reflect a lower than average number of incidents. This seasonal pattern is similar to what was measured for highway VMT, or Vehicle Miles Traveled (see Transportation Indicators, September 2001, Special Section). The graph of the monthly seasonal variation for highway VMT is provided in Figure 3.



AN ANALYSIS OF HIGHWAY HAZARDOUS MATERIALS INCIDENTS (continued)

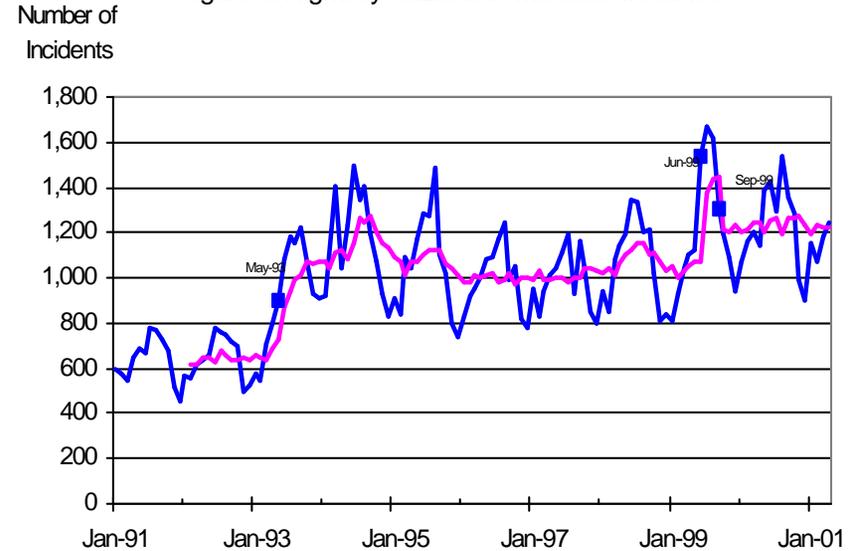
Figure 3. Monthly Seasonal Variation for Highway VMT



VMT exhibits the peaks in summer and the troughs in winter, but the winter low points occur more in January and February than in November and December (The low months for highway hazardous materials are November and December). Further research will be needed to explain this slight difference in seasonal patterns; one possible explanation might be that hazardous materials incidents generally involve freight movement, whereas highway VMT, as shown above, measures both passenger and freight movement.

The underlying trend of the data, which has been separated from the seasonal and irregular components, is now shown in Figure 4. The analysis of the trend does not point to a constant increase from one year to the next in that data. Rather, the data indicate a stable level from 1991 to mid-1993. A sharp increase occurs around May 1993, and then a new level is experienced through mid-1999. After a momentary spike from June to September 1999, a new level is reached for the remaining months.

Figure 4. Highway Hazardous Materials Incidents



Some of these pronounced shifts might be attributed to changes in reporting requirements. Beginning in April 1993, there was a sharp improvement in the reporting of incidents by small package carriers (possibly brought about by an OSHA action against one of the top carriers). This could be the explanation for the first shift upwards around May 1993. At present, we do not have an explanation for the increase that occurred in 1999. Intrastate motor carriers were required to start reporting incidents in October 1998, but the number of incidents from these small carriers does not appear to be great enough to cause the shift experienced in 1999. Additional research will be needed to specify a potential cause for such a change.

The resultant trendline for hazardous materials incidents on highway, displayed in Figure 4, is also shown in the main body of this report (page 18). This trendline will be updated monthly as new data arrive. Similar analyses will be performed on additional indicators throughout the year.

